DOCUMENT RESUME

ED 449 333 CE 081 217

AUTHOR	Thompson, Jeffery W.; Turner-Meikeljohn, Susan; Conway, Maureen
TITLE	Focus: HOPE. A Case Study of a Sectoral Employment Development Approach. Sectoral Employment Development Learning Project Case Study Series.
INSTITUTION	Aspen Inst., Washington, DC.
SPONS AGENCY	Ford Foundation, New York, NY.; Annie E. Casey Foundation, Baltimore, MD.; Mott (C.S.) Foundation, Flint, MI.
ISBN	ISBN-0-89843-306-1
PUB DATE	2000-12-00
NOTE	73p.; For other sectoral studies, see ED 444 017, ED 442 985 and CE 018 218.
AVAILABLE FROM	Publications Department, The Aspen Institute, P.O. Box 222, Queenstown MD 21658; Tel: 202-736-1071; Fax: 410-827-9174; E-mail: sedlp@aspeninstitute.org; Web site: http://www.aspeninst.org/eop/eop_sedlp.asp.
PUB TYPE	Reports - Research (143)
EDRS PRICE	MF01/PC03 Plus Postage.
DESCRIPTORS	Adult Education; Case Studies; Civil Rights; *Economically Disadvantaged; *Industry; *Job Development; Job Placement; *Job Training; Machine Tools; *Machinists; *Metal Working; Outreach Programs; Program Development; Recruitment; Trade and Industrial Education
IDENTIFIERS	Michigan (Detroit)

ABSTRACT

This case study on Focus: HOPE is the fourth of six sectoral studies to provide an in-depth look at individual sectoral employment development programs and their interaction within distinct economic and industry environments. It explores HOPE, a Detroit civil rights organization with a highly developed machinist training program. Section 1 discusses its programs, historical events that led to its current structure, details of HOPE's sectoral strategies, and key relationships it has formed to achieve its objectives. Section 2 describes important features of the machinist-related occupations and industry that employs these workers. It discusses relationships between machine shops and competitive factors affecting the automotive industry. Section 3 focuses on how HOPE puts its sectoral strategies into practice, particularly how it interacts with and influences industry and other key educational and governmental entities to increase employment opportunities for the disadvantaged population. Section 4 reviews HOPE's core training program, the Machinist Training Institute (MTI), with training programs for disadvantaged people with a range of skills and educational backgrounds. It explains the content and approach of each training course and the services that provide outreach, recruitment, evaluation, and post-training placement assistance. Section 5 discusses outcomes associated with MTI's training, including ratios for graduation and placement rates, and costs. Section 6 reviews lessons learned and challenges HOPE faces. (YLB)

Reproductions supplied by EDRS are the best that can be made
from the original document.

ED 449 333

Sectoral
Employment
Development
Learning
Project

Focus: HOPE

A Case Study of a Sectoral Employment Development Approach

BEST COPY AVAILABLE

CE 081 217
CE081217

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
☒ This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
● Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.
2

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY
S. Ralston
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
1

Copyright 2000 by the Economic Opportunities Program of the Aspen Institute

Published in the United States of America
2000 by the Aspen Institute

All Rights Reserved

Printed in the United States of America

ISBN: 0-89843-306-1

Graphic Design by **olmsted**associates, Flint, Mich.
Printing by PrintComm, Inc, Flint Mich.

Other publications in the Sectoral Employment Development Learning Project Case Studies Series:

The Garment Industry Development Corporation: A Case Study of a Sectoral Employment Development Approach

Executive Summary: The Garment Industry Development Corporation Case Study

Asian Neighborhood Design: A Case Study of a Sectoral Employment Development Approach

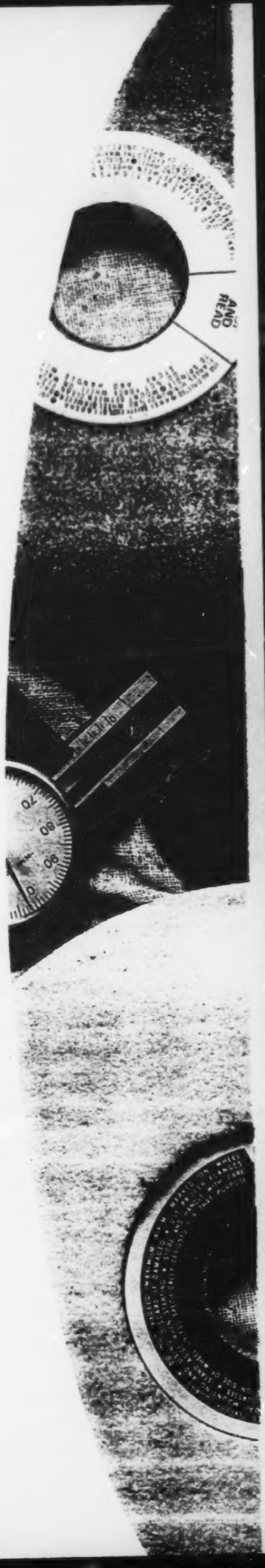
Jane Addams Resouce Corporation: A Case Study of a Sectoral Employment Development Approach

These and other publications about sectoral employment development are
available by contacting the Aspen Institute by mail or through one of the following:

(202) 736-1071
e-mail: sedlp@aspeninstitute.org
www.aspeninstitute.org/eop

Focus: HOPE

A Case Study
of a Sectoral Employment
Development Approach



Jeffery W. Thompson
Susan Turner-Meikeljohn
Maureen Conway

December 2000

Economic Opportunities Program
The Aspen Institute
One Dupont Circle, NW
Suite 700
Washington, DC 20036

The Sectoral Studies

This case study is the fourth in the SEDLP Case Studies Series of six sectoral studies to be published by the Sectoral Employment Development Learning Project of the Economic Opportunities Program of the Aspen Institute. The purpose of these case studies is to provide an in-depth look at individual sectoral employment development programs and their interaction within distinct economic and industry environments. The sectoral studies offer policy makers and practitioners insights on issues involved in operating a sectoral intervention.

Although each case study will explore a particular program in a specific industry sector and regional context, all will answer the same key research questions and use a common research format. The methodology relies on primary data collection through interviews with program staff, program participants, local employers and other key actors such as union representatives, public officials and industry association leaders. That information is supplemented by the analysis of internal program documents and financial statements and limited use of secondary source materials.

The Sectoral Studies are made possible through the support of the Mott, Ford and Annie E. Casey foundations.

Acknowledgements

The authors would like to thank Joanna Woods and her staff at Focus:HOPE's Machinist Training Institute in Detroit, Michigan, for sharing their thoughts and experiences about Focus:HOPE's training programs, patiently answering all our questions and for reviewing draft versions of this report. In addition, their assistance in facilitating the logistics of our on-site work was invaluable. We also thank the students at Focus:HOPE who openly shared their experiences and hopes for the future. We greatly appreciate Eleanor Josaitis and the senior management team at Focus:HOPE for sharing their time with us in discussing Focus:HOPE's perspective on training as it fits within the organization's broader mission. Special thanks goes to our colleague, Amy Kays, for her thoughtful comments on both the substance and structure of this report and her assistance in editing portions of this work. We also thank the Charles Stewart Mott Foundation for providing us with the photos of Focus: HOPE used herein, which were taken by photographer Rick Smith. Finally, we would like to thank Jack Litzenberg of the Mott Foundation for his knowledgeable and insightful commentary on draft versions of this work.

CONTENTS

OVERVIEW 2
PROGRAM STRATEGY 6
Organizational History 6
Focus:HOPE's Model Businesses 8
The Development of the Machinist Training Institue 9
Focus:HOPE's Remedial Education Programs 10
Center for Advanced Technologies 11
The Information Technologies Center 11
Focus:HOPE Campus 13
Organizational Structure 13
THE INDUSTRY CONTEXT OF THE MACHINIST OCCUPATIONS 15
Who Is a Machinist? 15
Machine Shops in Detroit 21
The Driving Force: The Automotive Industry 22
The Automotive Supply Chain 22
Globalization of Automotive Production 24
Implications for Automotive Employment in Michigan 25
IMPLEMENTING A SECTORAL FOCUS 27
Helping the Disadvantaged Get Good Jobs While Meeting Employer's Needs 27
Running Model Businesses: Working and Learning 27
Listening to Employers 28
Providing Trained Workers When Employers Need Them 29
Building Partnerships with Industry and Government 30
Strategically Recruiting Talent 31
TRAINING STRATEGY 33
Admissions Process for MTI 33
Remedial Education Programs: First Step and Fast Track 35
Machinist Training: Vestibule and Core 1 36
Advanced Studies: Core 2 and CAT 39
The Learning Environment at MTI 41
Student Demographic Profile 43
Attrition Issues 46
MTI: Program Leadership and Staffing 47
MTI: Critical Institutional and Funding Relationships 48
PROGRAM OUTCOMES AND COSTS 51
Outcomes 51
Program Costs 54
Funding Challenges 56
LESSONS AND CHALLENGES 58
Keys to Success 58
Challenges and Building on the Lessons of the Past 61

Recognizing the dignity and beauty of every person, we pledge intelligent and practical action to overcome racism, poverty and injustice. And to build a metropolitan community where all people may live in freedom, harmony, trust and affection. Black and white, yellow, brown and red from Detroit and its suburbs of every economic status, national origin and religious persuasion, we join in this covenant.

[Focus:HOPE Mission Statement adopted March 8, 1968.]

Focus:HOPE is a civil rights organization co-founded by the Rev. William Cunningham and Eleanor Josaitis in 1967 in the aftermath of the Detroit riots. Originally a group of concerned volunteers, today the organization has grown to one of about 800 employees and thousands of volunteers. Over the years Focus:HOPE developed a range of programs in support of its mission, including one of the largest food distribution centers in the country, a state-of-the art childcare facility, and a wide range of educational and occupational training programs. Focus:HOPE's programs have served tens of thousands of disadvantaged Detroiters, and its educational and training programs have earned the organization a national reputation in the field of education and training. These latter programs center on the concentration of machining and related occupations in the Detroit area and are the subject of this case study about Focus:HOPE's approach to sectoral employment development.

Focus:HOPE's intense industry knowledge and close industry contacts are part of what distinguishes the organization as a sectoral initiative. There is an outline in the box about the primary characteristics of a sectoral initiative and how Focus:HOPE has exhibited these characteristics.[1]

By cultivating close working relationships with industry, Focus:HOPE has acquired the technological expertise and intimate knowledge of the skill requirements of the metalworking industry to develop a continuum of training and educational opportunities for occupations ranging from semi-skilled entry-level factory workers to manufacturing engineers. Developing a high level of technical expertise and close collaborations with the Big Three automakers

---

[1] The definition of sectoral initiative is explained in Peggy Clark and Steven L. Dawson, *Jobs and the Urban Poor: Privately Initiated Sectoral Strategies,* (Washington, D.C.: The Aspen Institute, 1995).

and other key actors in the industry has enabled Focus:HOPE to break down barriers that have prevented minorities and women from gaining access to jobs and career paths in the auto-related industries of metropolitan Detroit.

STOP AND READ

Focus:HOPE as a Sectoral Initiative

Targets a particular occupation or set of occupations within an industry. Focus:HOPE's Machinist Training Institute (MTI) programs target a number of machinist-related occupations in the metalworking industry.

Intervenes by becoming a valued actor within the industry that employs that occupation. Focus:HOPE pursues its objectives in the metalworking industry through various strategic interventions. Not limited to just state-of-the-art training and educational services, the organization has established its technological prowess as a supplier of component parts to the automotive industry, the U.S. Department of Defense (DOD) and other users of machined products.

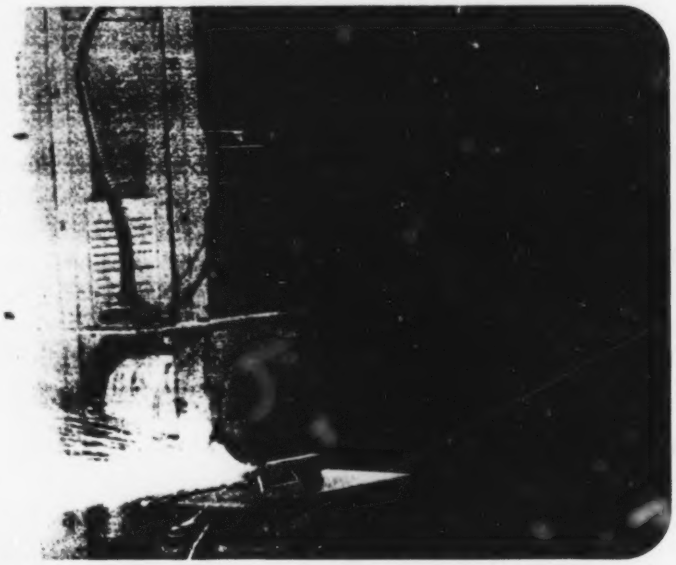
Exists for the primary purpose of assisting low-income people to obtain decent employment. Focus:HOPE's civil rights mission explicitly includes the objective of assisting low-income people to move out of poverty. Since the inception of the machinist training programs, the organization has trained and placed thousands of disadvantaged people in good jobs that pay decent wages.

Eventually creates systemic change within that occupation's labor market. Over the years, by placing its students for the first time in hundreds of machine shops that had previously been closed to blacs and women, Focus:HOPE has opened the doors for many others. The organization has undertaken numerous other initiatives to expand opportunities for minorities, and it pursues policy efforts to establish skill standards for the industry and to support long-term training for the disadvantaged.

This case study will explore Focus:HOPE's organizational history and structure, the characteristics of the industry it has targeted, and the specifics of its training program and operations to provide insight into how the organization has developed and implemented its sectoral intervention. The case study is organized into six sections.

Section 1: Program Strategy – This section provides an overview of Focus:HOPE's programs. The discussion includes the important historical events that led to the organization's current structure and significant details of Focus:HOPE's sectoral strategies, and highlights some of the key relationships the organization has formed to achieve its objectives.

Section 2: Industry Context of the Machinist Occupations – The important features of the machinist-related occupations and of the industry that employs these workers are described to provide the background to fully understand Focus:HOPE as a sectoral initiative. Because the demand for machinists in Detroit is driven by automotive employment, information on the relationships between machine shops and the automobile producers is also provided. In addition, the competitive factors affecting the automotive industry are discussed, especially in the Detroit metropolitan region.


Over time, Focus: HOPE has developed a wide range of educational and occupational training programs.

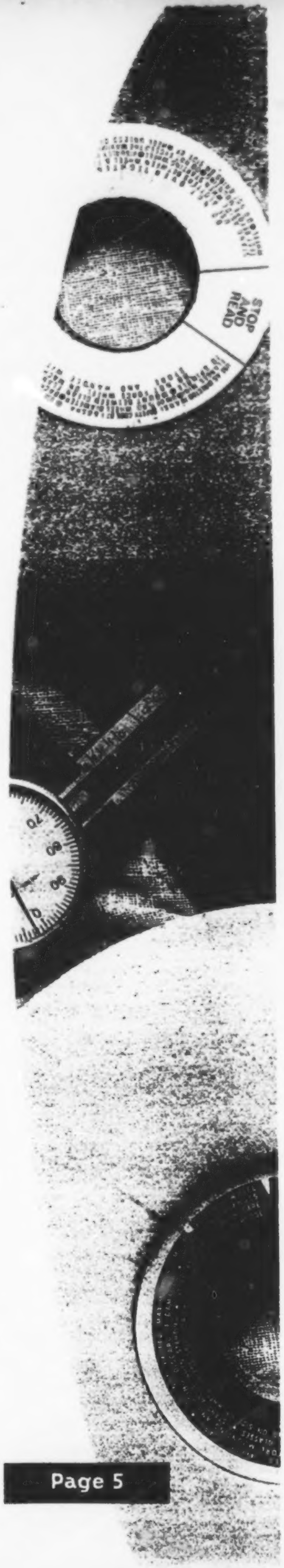
9

Section 3: Implementing a Sectoral Focus – This section focuses on the ways in which Focus:HOPE puts its sectoral strategies into practice. Particular attention is given to describing how Focus:HOPE interacts with and influences industry and other key educational and governmental entities to increase employment opportunities for the disadvantaged population of Detroit.

Section 4: Training Strategy – Focus:HOPE's core training program, the Machinist Training Institute, is reviewed in detail. MTI has training programs for disadvantaged people with a range of skills and educational backgrounds. There is an explanation of the content and approach of each of the training courses as well as the services that provide outreach, recruitment, evaluation and post-training placement assistance. In addition, information is given on how MTI relates to Focus:HOPE's other educational and training initiatives, which are also described here, but in less detail.

Section 5: Program Outcomes and Costs – The outcomes associated with MTI's training are discussed. Ratios for graduation and placement rates are presented as well as a discussion of how the outcomes from the training program further Focus:HOPE's mission. The costs of the MTI program are also examined in this section along with costs per participant and a detailed description of the major cost components of the MTI programs.

Section 6: Lessons and Challenges – The case concludes by reviewing the lessons Focus:HOPE has learned and the challenges it faces as it goes forward.



Focus:HOPE was founded in 1968 by the Rev. William Cunningham, a charismatic Irish American priest, who sought to concretely address issues of racial and economic injustice raised by the 1967 rebellion in Detroit. He was joined in this effort by Eleanor Josaitis, who took over as executive director of the organization upon Father Cunningham's death in 1997. Father Cunningham and Ms. Josaitis sought ways to address the needs of Detroiters and, over the years, they created an organization that provides a wide range of services and opportunities for the Detroit community. These include education and training programs and manufacturing businesses, the initiatives that are the focus of this case study, as well as a food distribution program, a child-care center and a community arts program. This array of services is continually analyzed by Focus:HOPE management and staff to assess whether it is contributing to the mission of Focus:HOPE; that is, each program should contribute to overcoming racism, poverty and injustice and to building an integrated society.

The idea of a training program that could lead to the integration of this occupation and lessen poverty in the black community was a perfect fit with Focus:HOPE's mission.

Organizational History

Establishing a Reputation: While Focus:HOPE is known nationally for its training programs in Detroit, many people still associate the organization with food. Focus:HOPE founded its Commodity Supplemental Food Program in 1971, taking over a food distribution program that had been one of the smallest in the country and developing it so that today it is the nation's largest commodity program. It feeds 19,000 at-risk mothers and 27,000 low-income seniors per month. Focus:HOPE's second major accomplishment in the Detroit area was in a lawsuit against the Automobile Club of Michigan. In 1970, Focus:HOPE filed a class action lawsuit against the organization for discriminatory practices against minorities. After a 13-year battle, Focus:HOPE won the suit and the club paid more than $3 million to former and current black employees. According to Ken Kudek, an assistant director at Focus:HOPE and one of the original members of the management team, these two successes earned Focus:HOPE a reputation as a capable organization, a reputation that helped them as they sought support for developing an occupational training program.

Opening MTI: The choice of machinists as the focus for training was somewhat serendipitous. Seeking an expanded parking lot for the food program, Cunningham went to speak with the owners of the machine tool company across the street which was closing. The owners, however, were hoping to interest Cunningham in purchasing the whole facility, and, on touring the factory, he saw that the machinist occupation seemed to be populated by older white males. Upon doing some research he found that indeed very few blacks had entered the occupation and that much of the current workforce was nearing retirement age. The idea of a training program that could lead to the integration of this occupation and lessen poverty in the black community was a perfect fit with Focus:HOPE's mission.

In 1980, Cunningham used his research to convince the U.S. Department of Defense that, if war broke out, U.S. manufacturing would be unable to produce required arms because of a shortage of machinists. Not only was he able to obtain federal job training funds, Cunningham was so convincing that he was also able to acquire a broad variety of federal surplus fabricating machinery to set up the Machinist Training Institute. After much fundraising for operational support, building renovations and other needs, Focus:HOPE opened MTI in 1981.

Establishing Manufacturing Businesses: By the time Focus:HOPE's first class of machinists graduated in 1981, the auto industry was reeling from overseas competition and many companies were laying off workers. Despite this dismal situation, Focus:HOPE placed all but 20 of the first class of 56 in jobs. Placement was arduous, however. Thomas Armstead, assistant director of Focus:HOPE and director of training at that time, notes that of the first 200 companies they worked with on placement, only three had ever hired a black. Given this environment, placing 36 was pretty good, but not good enough. Cunningham called General Motors President James McDonald. McDonald wanted to help and tried to work first with the union at General Motors (GM) and then through his supplier network to see if he could find positions for the remaining 20. Given that it was a period of layoffs, he encountered tremendous resistance at all levels with suppliers and union representatives saying that those who had been laid off had to be rehired

STOP AND READ

first. Rather than give up there, McDonald asked Cunningham if he could accept a small production contract instead and hire the newly trained machinists himself. And so F&H Metalcrafting was born. From this beginning, Focus:HOPE developed other manufacturing entities described below.

Focus:HOPE's Model Businesses

Focus:HOPE eventually operated four manufacturing-related businesses on its campus to address employment as well as educational and training goals and to generate revenue for Focus:HOPE programs. Three of these businesses were for-profit entities that Focus:HOPE controlled through a holding company. For a variety of business reasons, the three for-profit entities have been consolidated and now operate as Focus:HOPE Logistics. The fourth, TEC Machining, Inc. (TMI), remains an integral part of the training program at Focus:HOPE's Center for Advanced Technologies (CAT) and is run as a nonprofit business. The box provides information on the types of businesses Focus:HOPE runs and the clients they serve.

Focus:HOPE's Model Businesses

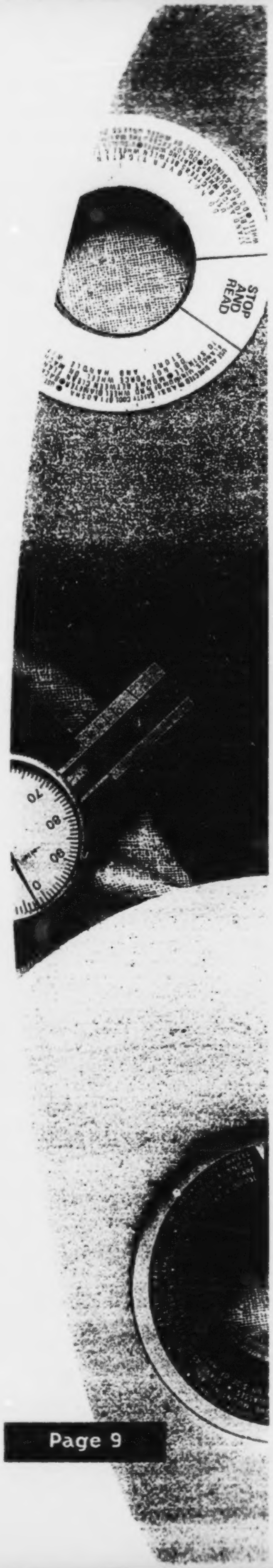
TEC Machining, Inc., the CAT production arm, applies advanced manufacturing processes to a variety of industry challenges. TEC Machining, Inc. performs high technology, high tolerance machining primarily for the auto industry. Examples of products and clients include:

- Detroit Diesel Corporation's entire line of power take-off units (more than 160 distinct pulley designs)
- a series of accessory brackets for DaimlerChrysler's JEEP line
- the aluminum manifold for General Motors' 3100 engine for the Tonawanda, N.Y. plant
- the water crossover assembly for General Motors Luxury Car Division Cadillac NORTHSTAR Engine for the 2000 model year
- American Axle with a machined carrier
- Bosch Corp. with a spacer that goes on their finished brake assembly for DaimlerChrysler
- brake shoes for the Department of Defense 5-ton truck fleet

BEST COPY AVAILABLE

TEC Machining, Inc. occupies nearly 300,000 square feet in two adjacent buildings on Oakman Boulevard in Detroit. The main building includes an 80,000-square-foot manufacturing floor, capable of supporting six independent manufacturing "neighborhoods" and up to 500 engineer-technologists at maximum capacity. TMI currently employs about 400 workers, of whom about 120 are Core 2 and CAT students. A co-generation energy plant provides the facility with its own electricity, hot water, heat and air conditioning and incorporates a high-efficiency waste recovery system. Because TMI's primary mission is to provide a learning environment for the Core 2 and CAT students, it operates as a not-for-profit business.

Focus:HOPE Logistics receives, sorts and distributes used General Motors' transmissions and converters to the automaker's re-manufacturing centers. It also containerizes and re-packages 37 different parts for GM Powertrain and is the sole distribution site for GM American-made auto parts shipped to China. The company also makes a variety of machined products for Chrysler, Ford, Bosch and Detroit Diesel. Products may include camshaft thrust plates, machine castings, bearing caps and other items. In addition Focus:HOPE Logistics supplies engine hoses to Detroit Diesel Corporation and the U.S. Department of Defense and emission control harnesses to General Motors. Focus:HOPE Logistics received its QS9000 certification in 1998. Currently, 35 workers are employed by the company.



The Development of the Machinist Training Institute

MTI has evolved through the years into three components: Vestibule, a five-week program designed to find out if the student really has the interest and aptitude necessary to be successful in the program; Core 1, the 26-week training program at the heart of MTI that covers such topics as basic machining, blueprint reading, technical drafting, computer-aided design (CAD), manufacturing theory and communications skills; and Core 2, a 13-week pre-engineering program that covers topics such as advanced machining, Geometric Dimensioning & Tolerancing, Statistical Process Control and pre-calculus. In Core 2, MTI students work on production contracts at the Center for Advanced Technologies (TEC Machining, Inc.), using the skills they acquired in Core 1.

Core 1, although modified over the years, is the original basis of MTI. To address early attrition in Core 1, MTI developed Vestibule. Staff has found that Vestibule is a useful tool for helping students decide whether they are ready for the commitment that Core 1 training demands. It allows students to complete a five-week course successfully and choose not to continue, rather than fail to complete a full 31-week course. As the CAT was being developed, staff found that the skills acquired in Core 1 were not quite sufficient to prepare students for the level of rigor required in the CAT. Therefore, Core 2 was developed as a transitional course to prepare students to succeed in the CAT.

Staff has found that Vestibule is a useful tool for helping students decide whether they are ready for the commitment that Core 1 training demands.

Summary of Focus:HOPE's Educational Offerings

First Step: Remedial four-week program that accepts students with at least sixth-grade level math and eighth-grade level reading. By the end of the course students have achieved an eighth-grade level competency in math.

Fast Track: A seven-week program designed to bring students up to a tenth-grade math and ninth-grade reading level from a minimum requirement of eighth-grade level reading and math.

Machinist Training Institute: Vestibule, a five-week introductory course in machining; Core 1, a 26-week training program in machining; Core 2, a 13-week transitional program in advanced machining and pre-engineering

Center for Advanced Technologies: Advanced program leading to an associate's or bachelor's degree in manufacturing engineering and technologyInformation

Technologies Center: Offers a broad range of industry-certified training programs concentrating on network administration, network installation and desktop support capabilities.

Focus:HOPE's Remedial Education Programs

Experience with MTI spurred the creation of four other educational and job training programs. The first is Fast Track, a seven-week program begun in 1989 that was designed to upgrade the skills of those who do not meet the basic math and reading requirements for entry into MTI. More recently, Focus:HOPE has added another remedial program. First Step was begun in 1997 for students who need additional instruction in basic skills to qualify them for the Fast Track program. While Focus:HOPE requires a high school degree or a GED to enter any of its training programs, the organization has found that these credentials do not necessarily indicate students bring the required level of basic skills. By developing these programs, Focus:HOPE is able to serve a larger proportion of individuals in need of assistance in finding a good job.

> *What's good is that everybody gets a chance, you know, regardless. Like if you don't make the test for MTI, they've got Fast Track for you. They've got First Step, beyond that I don't know what to say about it. But they try to give everybody a chance. Basically everybody, anybody can get in here.*
>
> — Core 2 student

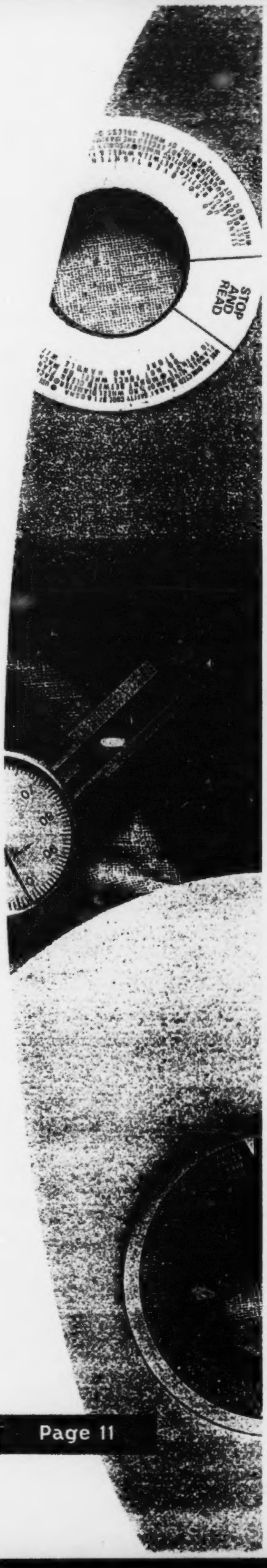
Center for Advanced Technologies

The Center for Advanced Technologies was built in 1992-1993 as a national demonstration project created to educate manufacturing engineers-technologists. The CAT, which operates a business providing parts under contract for local industry, stresses hands-on training using advanced manufacturing equipment. Thus, the educational program is structured by demands of real contracts while providing a self-paced interdisciplinary curriculum created by the Greenfield Coalition, a consortium of six companies, an engineering society and five university partners. From 1994-2000, 41 students earned associate's degrees and 16 have acquired bachelor's degrees in Engineering.

The Information Technologies Center

The impetus for the creation of this new program (the first class graduated in January 1999) offering certification in information systems and network administration, came from two pressing demands: strong needs for such services in the outside market and from within Focus:HOPE.

Focus:HOPE noted that the United States faces a shortage of 190,000 to 350,000 information technology workers. In addition,



Focus:HOPE, as a nonprofit organization, was having difficulties attracting qualified systems and network administrators to maintain over 700 computers and servers on their own campus at a rate of pay they could afford. Staff decided this would be a good field in which to try to expand what they have learned in the machining sector— providing access to a wider range of good jobs. This program is based on increasing market demand for skilled workers who, in the Detroit area, can command beginning salaries of $25,000 to $35,000 annually.

For this 12- to 26-week program, entry requirements include ninth-grade math competency and a 12th-grade reading level. The program manager, Linda Hanks, emphasizes that if you are not a reader, you are not going to last in this industry. In addition, students are told up front that they will need a valid driver's license and a reliable car in order to be placed in most entry-level jobs in this industry.

Classes meet from 9 a.m. to 3 p.m. five days a week. Initially the plan was that, after the first few weeks of instruction, the course would follow a model in which students were in class half the day and worked on a job site for half a day. The jobs would be at Focus:HOPE or one of a number of companies that partner with the program, and students would be paid a stipend for their work. Staff found this model did not work, however. When businesses needed to have work done, they wanted it done right away and could not wait until the time a student was scheduled for work experience. Moreover, some jobs would require more than a half day of work. Thus, the pool of jobs that would be appropriate for the students was insufficient, and the instructional model was changed to include a combination of classroom and lab work. Program staff would still like students to have real work experience. They are trying to attract more partner companies to increase the potential pool of jobs and considering alternative ways of structuring work experience that might meet both training and business needs. At present, students engage in job shadowing, in which they accompany someone onto a job site, so that the program continues to provide exposure to real work situations.

At present, students engage in job shadowing, in which they accompany someone onto a job site, so that the program continues to provide exposure to real work situations.

Tuition is $6,500 for the network administration program and $6,000 for the network installation program. Student services help students find financial aid through grants and loans.

Focus:HOPE Campus

Focus:HOPE operates its broad range of programs and activities on a 40-acre campus covering an eleven-square-block area. The campus houses eleven plant and office buildings in an economically depressed area on Detroit's West Side. The Machinist Training Institute is sited in the former flagship plant of the Ex-Cell-O Corp. that was sold to Focus:HOPE in the early 1980s. This building houses the machinist operations and was extensively renovated in 1984-85. Other buildings house the CAT, the ITC and administration.

The campus also houses the Center for Children, a food commodities center, a conference center and a research facility. The Center for Children opened in 1987 and is licensed for about 250 children. It provides childcare and parenting classes for Focus:HOPE employees, students and residents in the surrounding community. Childcare components include infant and toddler care as well as a Montessori preschool that seeks to have every participating child who enters first grade at second-grade language and math skills levels. It also operates a Piaget-based preschool program.

Focus:HOPE's significant physical presence in the community has contributed to the stabilization and improvement of the neighborhood. Staff members and others comment on the improved condition of the housing stock and generally safer feeling that the area has acquired as Focus:HOPE has established itself as the "anchor tenant."

Organizational Structure

Focus:HOPE is a large organization, with roughly 800 employees, numerous regular volunteers, substantial physical plant and a multi-million-dollar budget. Eleanor Josaitis, Father Cunningham's co-founder and the current executive director, leads the senior management team, many of whom have also been with the organization since its founding.

At the time of the case study visit, the exact structure of the organization was being revised. For example, in the education and training division, rather than having the director of MTI report directly to the senior management team, there will be a new director of education, who will oversee all of the education programs, which

STOP AND READ

previously had been managed somewhat independently. The organization, having become quite large, is now trying to ensure that there is coordination among its programs so that they can better serve the Detroit community and achieve their mission. Focus:HOPE is indeed a very mission driven organization — one can see the mission posted in various places throughout their facilities, and it seems that staff members can all explain the mission and how Focus:HOPE's activities work toward the achievement of that mission. As Focus:HOPE goes through this process of working with staff on possibilities for organizational restructuring, the guiding principle is, as ever, how will such action contribute to the achievement of the mission.

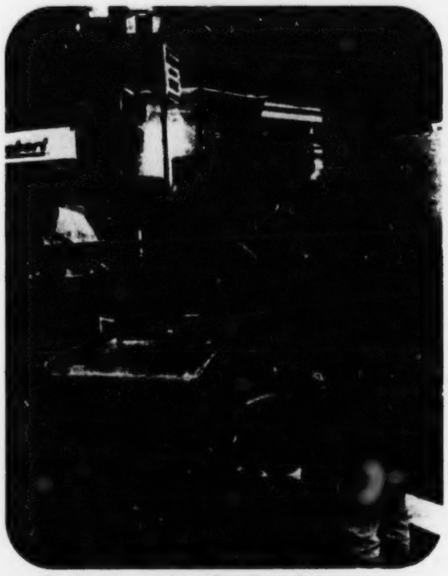
BEST COPY AVAILABLE

Focus:HOPE's Machinist Training Institute trains individuals for employment in the machinist occupations. Machining is a metalworking process where metal (or other composite material) is shaped by means of cutting operations. While there is a large and diverse market for machined products, the largest customer base for machined products is the automotive industry. With U.S. automotive production heavily concentrated in the upper Midwest, centering in metropolitan Detroit, it comes as no surprise that the demand for machinists is directly related to the operations of the Big Three automakers (GM, DaimlerChrysler and Ford) and their automotive parts suppliers.

Who Is a Machinist?

A machinist is a skilled worker who fabricates metal into a wide range of products or components, including engine and mechanical equipment parts. Machining operations involve taking raw metal stock or a casting and shaping it through a variety of cutting methods, such as lathe, mill and grinding operations, which are described in more detail in the box.

Machinist occupations may be crudely broken down into two groups — those who are engaged in preparing for and setting up a machining operation and those who tend the machine during production. At the top of the hierarchy is the precision machinist who has years of experience. At the bottom is the machine tender or operator who can walk in off the street and learn the basic machine functions in his/her first few weeks on the job while assisting and observing experienced workers. A machinist's title is usually denoted by the type of machine on which he or she works, such as precision grinder, lathe tender, etc.[2]


Machining was virtually closed to women and minorities until the 1980s.

STOP AND READ

---

[2] There are dozens of occupational types for machinists and machine operators that are frequently combined and reported differently by various information sources.

Machining Operations

- **Grinding** is the process by which surface material is removed by the abrasive action of a rotating wheel or moving belt. Grinding produces a smooth surface and objects with finely honed tolerances. A grinder or grinding machine has devices that hold a workpiece and move it past the abrasive wheel or belt.
- **Turning or lathing** is a cutting operation that produces cylindrical parts. A lathe rotates a workpiece against which a cutting tool is fed to remove the outer surface of the workpiece.
- **Milling** is the process of cutting away material by feeding a piece of metal past a rotating multiple tooth cutter. The machined surface may be milled to any combination of angular, curved shapes. The machine for holding the workpiece, rotating the cutter, and feeding it is a mill or milling machine.
- **Computer numerically controlled (CNC) machine tools** have computer controllers that direct the mechanisms of a machine tool through the positioning and machining according to a coded list of instructions. CNC machines produce parts with a level of precision not possible with traditional manual machining procedures.

Source: U.S. Department of Labor, Bureau of Labor Statistics, *Occupational Outlook Handbook*. Bulletin 2500, (January 1998).

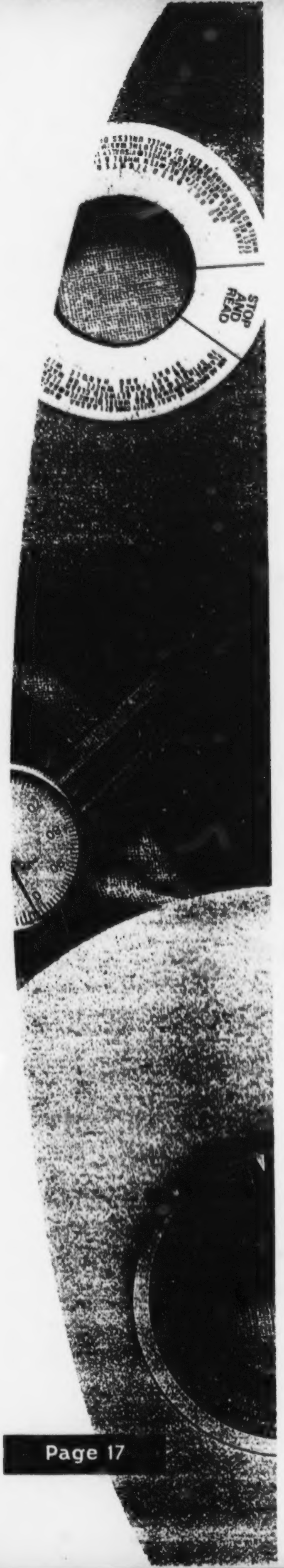
As is the case in many occupations, wages for machinists range widely for different positions. An entry-level machine operator starts at $6 to $7 per hour while a highly skilled precision grinder makes between $22 to $25 per hour plus benefits, as most employers also provide a full benefits package for all but temporary employees. The following table from the U.S. Bureau of Labor Statistics (BLS) provides the wages paid in several key machinist and machinist-related occupations in 1998 for the Detroit metropolitan area and gives a sense of how wages vary between the machinist and machinist-related occupations.

BEST COPY AVAILABLE

Table 2.1

Occupation	Average Wage for the Bottom 10% of Workers	Overall Average Hourly Wage	Average Wage for the top 10% of Workers
Machine operators, assemblers and inspectors	$7.93	$15.33	$20.57
• Lathe operators	9.10	14.72	18.00
• Grinding, abrading, buffing and polishing machine operators	7.75	11.90	17.75
• Assemblers	7.45	16.48	20.57
• Production inspectors	9.86	15.18	20.36
Precision production, craft and repair occupations	13.28	20.41	25.01
• Precision grinders, filers and tool sharpeners	15.50	21.75	23.83

Source: U.S. Department of Labor, Bureau of Labor Statistics, *Detroit-Ann Arbor-Flint, MI National Compensation Survey*, Bulletin 3095-05, (October 1998), 6.



A precision machinist's wages are based primarily on skill levels that have been developed largely through years of experience on the job and through training or education. For lower skilled machine operators, wages depend upon the type of product that the employer manufactures. Generally speaking, machine operators working for transportation equipment producers earn considerably more than those working in other industries. Unionized machine operators may command as much as 40 percent more than one with a nonunion employer. In Detroit these union jobs are concentrated in the Big Three and the largest of their suppliers.[3]

Until the 1980s, machining was virtually closed to women and minorities. It was rare to find a black man working as a precision machinist, and many small machine shops did not even have women's restrooms. Today, the machinist workforce is becoming more diverse, although the occupation is still dominated by older white males. This trend toward diversification is expected to continue as older workers retire and younger ones from more varied backgrounds are recruited. The Michigan Employment Security

---

[3] U. S. Department of Labor, Bureau of Labor Statistics, *Occupational Outlook Handbook*, Bulletin 2500, (January 1998), 43.

Commission has projected that for each year between 1994 and 2005 there will be 16,581 job openings in the two major occupation groups that include machinists and machinist-related occupations in the Detroit metropolitan statistical area (MSA). About 70 percent of these openings will result due to attrition.[4]

In Detroit, a common way to move into a better paying, unionized job is to start at a nonunionized auto parts supplier and to later be hired away by one of the Big Three.

What Does It Take to Become a Machinist? To be a good machinist one needs manual skills and physical strength. It requires an aptitude for working with tools, and while not nearly as physically taxing as iron working or some construction occupations, a machinist needs to be able to hoist a heavy metal casting and position it on a mounting plate for machining. The machinist must also have the capacity to:

- read blueprints to determine tolerances and specifications
- comprehend tooling instructions such as cutting speeds, feed rates, depth of cut and the types of cutting tools to be used
- use inspection tools, gauges, and measuring devices such as steel rule, depth gauge, protractor, micrometer, vernier caliper, etc.

These skills are all necessary to set up a tooling operation. Once a set up is complete, the machinist monitors the machine as it shapes the raw metal stock or casting. This set up and cutting operation must be repeated for each part that is to be produced. Hence, a machinist must pay considerable attention to detail to ensure that each product is machined to precise specifications. This ability to concentrate on repetitive tasks is made all the more taxing because of the manufacturing work environment. Although substantially cleaner than in years past, the work floor at most machine shops is permeated by metal shavings, lubricants and machine noise.

In addition to having mechanical aptitude and basic employability skills such as self-discipline and a sense of personal responsibility, most employers require entry-level machinists to have high school-level proficiency in math and reading. Focus:HOPE, for example, sets the benchmark at tenth grade for

BEST COPY AVAILABLE

---

[4] The two occupational groups are: precision production, craft and repairs; and operators, fabricators and laborers. (Michigan Office of Career Development, Employment Service Agency, Labor Market Information. *Occupational Forecasts by Major Occupational Groups, 1994-2004: Detroit MSA.* http://web.mesc.state.mi.us/employment_service_agency/LMI/occ_proj/ocm_01.htm)

math and ninth grade for reading as the requirements for the Core 1 machinist training program.

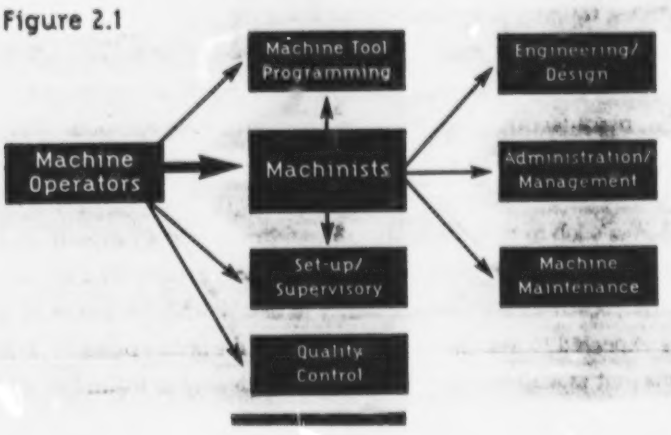
Increasingly, machinists and machine operators are called upon to work with computer numerically controlled equipment. In a CNC manufacturing environment, a controller or computer directs a sequence of machining operations. A tool programmer develops this coded set of instructions that directs the operation. It is the machinist's job to make sure that the program works properly and that it will not damage the equipment. As computer aided manufacturing software has become easier to use, machinists are increasingly expected to assume responsibility for the entire process. This means that machinists need the computer literacy to formulate and enter the commands and specifications for a machining operation.

Generally speaking, once the CNC operation is set up, a machine operator will monitor the machine to make sure it is working properly, load and unload materials and products, and in some cases make minor adjustments or changes to the machining process. The CNC process often simplifies tooling set-ups and allows one worker to operate several machines. Similar to the new skill requirements for machinists, the machine operator also needs some computer literacy to run a CNC operation.

How to Advance As a Machinist? Many if not most machinists begin their careers in lesser skilled positions—typically, working as machine operators or on an assembly line. Assemblers and machine operators who show promise, i.e., mechanical aptitude, enthusiasm and good work habits, are selected for supervisory or more technical positions, such as those in the skilled trades which includes machining. In Detroit, a common way to move into a better paying, unionized job is to start at a nonunionized auto parts supplier and to later be hired away by one of the Big Three. The automakers use their supplier chain as a source of talented young workers and for highly skilled tradesmen.

STOP AND READ

Figure 2.1



Michigan is the center of machine tool production in the United States. It has a very large employment base in the industry and a very high concentration of metalworking firms.

Within the machining occupations there are a number of routes for a worker to advance, as is illustrated in the diagram. Many lower skilled operators eventually become machinists, but many also move into CNC machine operations, quality control or even supervisory positions. Machinists who seek to advance their careers typically pursue opportunities in machine tool programming or design/engineering or any number of supervisory/management positions.

To move up in the trade usually means acquiring additional formal training as well as on-the-job experience. Traditionally, the most clear-cut occupational path to advancement as a machinist has been to complete an apprenticeship program and to achieve journeyman's status. Apprenticeship programs are sponsored by employers and provide a combination of work experience, education, and training to young workers over a four- to five-year period. While providing an excellent and transparent entry point and way to advance in the industry, there are relatively few apprenticeships available. Only 4,492 individuals in 1998 were enrolled in all of Michigan's manufacturing apprenticeship programs, of whom 429 or 10 percent were minority and 264 or 6 percent were female.[5]

Today most machinists and machine operators receive their training through community college or technical institute programs. In the Detroit metropolitan area there are at least a half dozen insti-

---

[5] Source: Dana Daugherty of the U.S. Department of Labor, Employment and Training Administration, Apprenticeship Training, Employer and Labor Services. Washington, D.C.

BEST COPY AVAILABLE

The primary skills students need to become machinists are imparted during the 26-week, Core 1 component of MTI.

admissions process. As shown in figure 4.1, these are the only programs at present that enroll students from outside Focus:HOPE. For more advanced courses, students must have completed the previous level within the Focus:HOPE series of courses.

Most Focus:HOPE students' expenses are paid through one of an array of federal or state job training programs.

Individuals interested in studying at MTI can call a recruiter or simply walk in and meet with one. The recruiter will arrange the appropriate tests, which include the Test of Adult Basic Education (TABE), Level D and the Bennet Mechanical Comprehension Test. The required rough Bennett score is 36/68. This test is required to ensure that applicants have sufficient mechanical aptitude to benefit from the school. Applicants do not need to have any prior machining or other experience. Applicants for all Focus:HOPE programs must pass a drug-screening test, which is provided by Focus:HOPE. Applicants for Vestibule must have two interviews to assess their motivation and the likelihood of their completing the program. After applicants undergo a physical exam, the Vestibule manager, who also completes the final interview, makes the final decision for admittance.

Seventy percent of applicants are denied admission to MTI because of failing the entrance exam, and/or drug screen or their failure to complete the application process. Applicants who are denied admittance solely because of poor test results are referred to First Step or Fast Track for remedial work.

Students who are accepted to MTI or one of the remedial programs then meet with a financial counselor to discuss the options that may be available to them for covering the cost of the training. Most Focus:HOPE students' expenses are paid through one of an array of federal or state job training programs, but students need to understand how they qualify for those funds and what the requirements are for maintaining that qualification. For tutions that offer programs on manufacturing technology that target machinists and machinist-related occupations. These programs offer certificate and degree programs for individuals seeking hands-on training for entry-level machinists as well as other more advanced academic programs in automotive design and engineering. Perhaps the most noted and extensive program offerings are available at Henry Ford and Macomb community colleges, both of which are located in the Detroit suburbs, making access to these programs difficult for the largely minority population in the city.

Machine Shops in Detroit

In spite of the enormous transformation in the U.S. auto industry that began in the early 1980s, manufacturing is still the foundation of the Michigan economy. Michigan is the center of machine tool production in the United States. It has a very large employment base in the industry and a very high concentration of metalworking firms. The bulk of Michigan's machine shops are located in the greater Detroit area.

Machine shops and employment in the related metalworking trades in Detroit are intimately linked to the auto industry and specifically the Big Three. In 1994 the Big Three employed over 288,000 individuals or 30 percent of all manufacturing workers in Michigan, and of these workers over 46,000 were employed in the skilled trades, which includes machinists and machinist-related occupations.[6] The majority of these workers are employed at the 19 assembly plants located in metropolitan Detroit.[7] Surrounding the manufacturing and assembly operations of the Big Three is a dense network of metalworking establishments that employ thousands of skilled tradesmen and production workers. These metalworking shops are generally independently owned, nonunion and relatively small.

While most machine shops in Detroit fabricate and supply component parts to the Big Three or their primary suppliers, this locus of demand for high quality machine products or services draws customers from other industry sectors and the federal government — principally the U.S. Department of Defense. As a manager of one small precision machine firm stated, "Automotive is our

STOP AND READ

---

[6] Sean P. McAlinden, Brett Smith and David Cole, *Driving Michigan's Renaissance, a Report for the Michigan Automotive Partnership and the Michigan Jobs Commission.* (Ann Arbor, Mich., Office for the Study of Automotive Transportation, Transportation Research Institute, The University of Michigan).

[7] *US Industry & Trade Outlook '99,* (The McGraw-Hill Companies and the U.S. Department of Commerce/International Trade Administration, 1999).

bread and butter. We might not have some of our other business if it weren't for them, and there's a chance that we might not be here."

The Driving Force: the Automotive Industry[8]

The automotive industry is the dominant manufacturing industry in the U.S. economy. In 1996 United States domestic automobile sales exceeded $15 million, and the value of shipments of all motor vehicles which included cars, trucks and buses was $209 billion. Of the vehicles sold in the U.S. market, approximately 85 percent or 12.8 million were produced domestically by the Big Three or by Japanese and European facilities located in the United States. Domestic production has grown annually by 7.6 percent over the past decade in response to strong consumer demand and due to heavy foreign direct investment in U.S.-based production facilities by the Japanese and German automakers. As domestic output has grown, total employment in the combined motor vehicle and motor vehicle parts industries has increased from 867,000 in 1987 to 954,000 by 1997.

Machine shops and employment in the related metalworking trades in Detroit are intimately linked to the auto industry and specifically the Big Three.

In short, the Big Three automakers dominate the automotive industry in the United States, and as previously noted, automotive and manufacturing employment in Michigan. While its share of total Big Three production has declined gradually since 1978, Michigan is still the largest auto producing state in the nation, rolling out over 3 million vehicles in 1996. Roughly 40 percent of all U.S.-based automobile-manufacturing employees still work in Michigan.

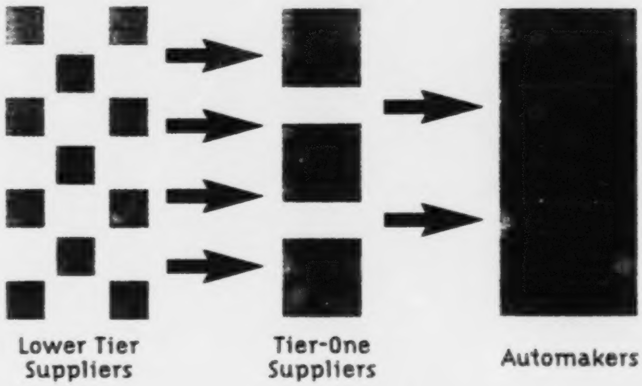
The Automotive Supply Chain

Although a complicated enterprise, automobile production can be roughly divided into two activities — the manufacture of parts and the assembly of those parts into vehicles. An average automobile contains more than 10,000 discrete parts that span numerous industry segments. While thousands of firms are engaged in the manufacturing of parts, the production process is dominated by a few large automakers that are engaged in the initial design and the final assembly of vehicles. Finally, there is also a small portion of the motor vehicle parts industry that is concerned

---

[8] The statistics in the following section are derived from the *US Industry & Trade Outlook '99* (The McGraw-Hill Companies and the U.S. Department of Commerce/International Trade Administration, 1999).

Figure 2.2 Automotive Supply Chain

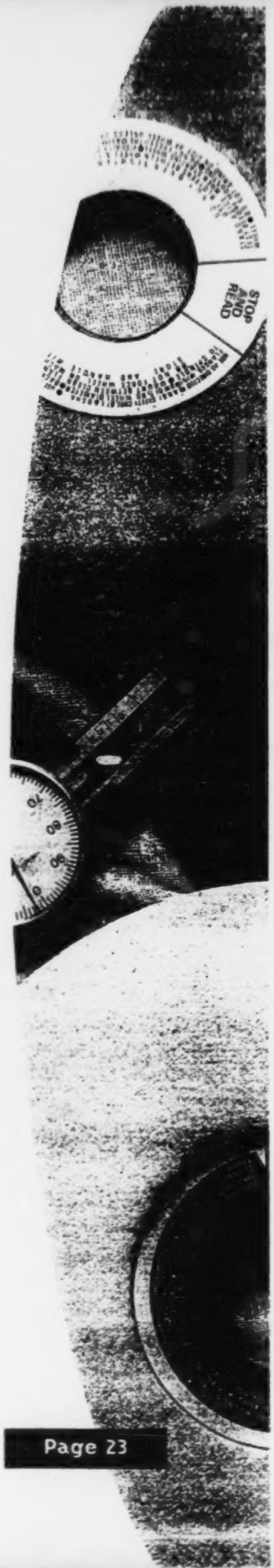


with the production of replacement parts. This is generally referred to as the aftermarket.

Automakers control the production of parts via formal ownership or contractual relationships. In some instances, automakers vertically integrate the production of parts into their organizations. These operating units are commonly referred to as captive suppliers. In other cases, automakers acquire parts from independent suppliers under various contractual arrangements. In the past, the major North American and European automotive producers relied on more vertically integrated sourcing systems, while the Japanese acquisitioned through independent suppliers. However, beginning in the 1980s, Ford and DaimlerChrysler and later GM shed most of their internal parts operations.

The process of external acquisition involves contracting with key suppliers for parts and increasingly entire sub-assemblies (e.g. the transmission, brake and suspension systems). These key suppliers (tier-one suppliers) design parts and sub-assemblies according to the automakers' specifications and then organize their production, which frequently involves additional suppliers (tier-two or tier-three suppliers).

Automobile assembly plants, and to a large extent their suppliers, are clustered geographically in key areas in the United States, with the heaviest concentrations in the upper Midwest. Historically, suppliers located proximate to assembly plants, and as the density



BEST COPY AVAILABLE

of suppliers has increased, new domestic assembly operations have tended to gravitate towards the major supplier complexes. As the largest automobile producing state, Michigan has a large number of assembly plants. To furnish this concentration of assembly operations, a dense network of motor vehicle parts suppliers has grown up in the area. Nineteen of the world's top fifty suppliers have headquarters or major operations in metropolitan Detroit.[9]

The Big Three has projected that over 240,000 of their U.S. employees will leave employment during the period 1995 to 2003.

Globalization of Automotive Production

The geographic distribution of automotive production across the globe generally followed a pattern set by U.S. firms in the early and mid 20th century. Initially, the Big Three exported into new foreign markets. But as automotive exports increased, so did our trading partners' current account deficits, and they soon erected import barriers to address trade imbalances and in some cases to protect their own infant automobile industries. To circumvent protectionist barriers, U.S. automotive firms established overseas production facilities. Tariff and other import barriers created protected markets and ensured profitability of the multinational parent.

During the 1980s and early 1990s, the process of globalization accelerated rapidly as auto producers raced to establish market shares in what were perceived to be rapidly growing markets in the developing nations of Asia. This deluge of foreign direct investment, combined with the existing protected but underutilized manufacturing facilities in Latin America and Europe, has created a huge amount of excess capacity for automotive production. The economic turmoil and uncertainties facing Asia and Latin America and general sluggishness of the Japanese and most of the European economies throughout the mid 1990s has only served to exacerbate this situation. Consequently, it is estimated that by 1997, excess production capacity worldwide had reached nearly 21 million units.[10]

Automakers are seeking to rationalize their global operation through consolidations, such as the much-noted DaimlerChrysler merger, and the reduction in unique platforms, engines and parts in order to improve economies of scale and reduce development and investment costs. Standardizing and reducing the variety of components that go into a vehicle facilitates the automakers' efforts to cre-

---

[9] *US Industry & Trade Outlook '99*, (The McGraw-Hill Companies and the U.S. Department of Commerce/International Trade Administration, 1999).

[10] The Automotive Planning Group of Coopers & Lybrand. *AUTOFACTS, Early Warning*, 7(4) (May 1999). (http://www.autofacts.com/free/ewr.0599m.pdf)

BEST COPY AVAILABLE

ate global sourcing networks. This has meant a dramatic reduction in the number of tier-one suppliers worldwide from 3,000 in 1990 to 1,500 in 1996. Some experts believe that as few as 375 may survive into the early 2000s with most going out of business or into other sectors.[11] To survive, the remaining tier-one megasuppliers must be able to produce globally and to provide the highest quality engineering, design, sub-assembly and other core services — all at rock-bottom prices. It is generally held that the largest U.S.-based suppliers have led the way in establishing global production capability.[12]

A series of trade and investment agreements are now facilitating this move toward global production. In the early 1990s the Uruguay Round of the General Agreement on Tariffs and Trade (GATT), the North American Free Trade Agreement (NAFTA), and other recent trading agreements collectively reduced trade barriers and fueled investment throughout the world. The passage of GATT established a 58 percent reduction on automotive parts tariffs in the major markets. In 1993, by eliminating tariffs and export balancing requirements, liberalizing foreign direct investment rules, and clarifying automotive standards and national regulations, NAFTA provided suppliers with an unparalleled chance to restructure their North American manufacturing operations to achieve economies of scale and maximize quality and international cost competitiveness. An early indication of perhaps longer-term trends has been the dramatic increase in exports of parts and components to the United States from Mexico which have jumped 81 percent in the four years following the ratification of the agreement.[13]

Implications for Automotive Employment in Michigan

The major automakers face replacing a significant number of skilled and entry-level workers within the next few years, largely due to the aging of their current workforce. The Big Three has projected that over 240,000 of their U.S. employees will leave employment during the period 1995 to 2003. Because the workforce in Michigan is on average older and has more years of service than in the rest of the United States, nearly half of these workers are expect-

STOP
AND
READ

---

[11] *US Industry & Trade Outlook '99*, (The McGraw-Hill Companies and the U.S. Department of Commerce/International Trade Administration, 1999).

[12] Timothy Sturgeon and Richard Florida. *The World That Changed the Machine: Globalization and Jobs in the Automotive Industry*. (Final Report to the Alfred P. Sloan Foundation, May 5, 1999).

[13] *US Industry & Trade Outlook '99*, (The McGraw-Hill Companies and the U.S. Department of Commerce/International Trade Administration, 1999).

ed to come from Michigan-based operations.[14] While estimates vary, the Michigan Employment Security Commission forecasts openings at the Big Three in the skilled trades and production jobs to run as high as 10,000 a year through 2003, which represents 28 percent of all new openings in these occupational profiles.[15] Parts suppliers face the same problems of an aging workforce. In some of the local plants, as many as 85 percent of all journeymen could retire immediately.

Tight labor market conditions already exist in Detroit where unemployment has hovered between 2.8 percent and 3.5 percent for the past couple of years.[16] Suppliers report that they are providing inducements such as higher pay and other incentives. At a manufacturer of fuel tanks, relatively low-skilled, entry-level assembly workers start at $9.00 per hour plus full benefits. These new employees are automatically eligible for a $1.00 raise after 60 days on the job and another $1.00 raise after 180 days, simply if they stay on the job and have good attendance records.

Indeed, while skills and educational requirements seem to be increasing, many young applicants lack even the most elementary math and other employability skills.

The declining number of employment-ready high school graduates in the state compounds the problem of finding employees to fill new jobs and those jobs vacated by retiring workers. Round table discussions with automakers and motor vehicle parts suppliers conducted by the Michigan Jobs Council repeatedly confirm employers' considerable concern about the employability of the current high school graduates.[17] Indeed, while skills and educational requirements seem to be increasing, many young applicants lack even the most elementary math and other employability skills.

While overall the unemployment rate in metropolitan Detroit is approaching a record low and employers are aggressively seeking capable workers, there remain pockets of persistent unemployment.[18] In this tight labor market, Focus:HOPE's training programs offer employers a continuing supply of trained workers and disadvantaged Detroiters a shot at a good job.

---

[14] Michigan Employment Security Commission, Research and Statistics, *Special Report, Auto Industry Employment Detroit: The Commission*, (August 8, 1995).

[15] Michigan Employment Security Commission, Research and Statistics, *Michigan Employment Projections 2005*, (Detroit: The Commission, September 8, 1995).

[16] Michigan Department of Career Development, Employment Service Agency, Office of Labor Market Information, (http://web.mesc.state.mi.us/employment_service_agency/LMI/econsit.econsit.htm)

[17] Sean P. McAlinden, Brett C. Smith and David E. Cole. *Driving America's Renaissance, Human Resource Issues in Michigan's Automotive Industry*. (Ann Arbor, Mich., Office for the Study of Automotive Transportation, Transportation Research Institute, The University of Michigan) 63.

[18] By some measures, inner city unemployment may be as high as 10 percent. See Jeff Gerritt, "City trails suburbs on finding work," *Detroit Free Press*, (March 24, 1999). http://www.freepress.com/business/qjob24.htm)

Helping the Disadvantaged Get Good Jobs While Meeting Employer's Needs

From the beginning Focus:HOPE recognized machinist training as an opportunity to fulfill its mission to overcome racism and eliminate poverty. Effective machinist training could help integrate blacks and women into what formerly had been an all-white all-male occupation. Well-paying entry-level jobs would also put disadvantaged people on a career path that would lift them and their families out of poverty.

Focus:HOPE's value to industry is its ability to provide employers with workers who have the skills employers need for the positions companies are seeking to fill. Focus:HOPE does this by providing an array of training programs that prepare workers for positions ranging from entry- level assemblers up to manufacturing engineers with degrees. Focus:HOPE operates several businesses that support the organization's efforts to prepare individuals for the industry.

Many students gain work experience through Focus:HOPE businesses while they are in training, making Focus:HOPE graduates an even more valuable asset to employers. In addition, some of the former Focus:HOPE businesses are able to offer transitional jobs to individuals who need time adjusting to the world of work, allowing these individuals to gain experience and a better understanding of the expectations of industry employers. The businesses all offer parts and services that are of value to the industry. Focus:HOPE does not expect to get contracts because they serve a good cause, but rather because they provide quality products. This orientation helps keep the organization in close touch with industry demands and changes, and information on these trends then feeds through the entire organization, keeping all of Focus:HOPE's programs targeted toward current industry needs.

In a response to various business pressures, Focus:HOPE has consolidated several of its for-profit entities into a single for-profit subsidiary corporation. This entity continues to serve the same functions as its predecessors.

Running Model Businesses: Working and Learning

From the inception of the Machinist Training Institute, running model businesses has played an integral role in Focus:HOPE's training programs. In the 1980s when Detroit's automotive industry was shrinking and placing graduates was close to impossible, contracts from the Big Three gave Focus:HOPE the ability to ensure jobs for all their graduates. Focus:HOPE set up various enterprises to manufacture the products or provide services required under the contracts. Since their inception, the Focus:HOPE enterprises have competed head-to-head with other machine shops. Focus:HOPE businesses have earned QS9000 certification and they are classified as tier-one suppliers to the Big Three. This manufacturing capability demonstrates to employers the technological expertise resident at the organization, the quality of MTI's training and the capability of its graduates who are employed at the model businesses. It also sends a powerful message to entering trainees, showing them that Focus:HOPE in the words of one trainee:

> *...is a serious place and that it is really connected with the Big Three and, you know, if you work hard, Focus:HOPE will get you a good job.*

Listening to Employers

The MTI training objectives were based on modules originally designed for the Ingham County Intermediate School's vocational education programs. These modules were developed through a research effort that surveyed 400 local machine shops to determine what entry-level skills were most desirable. Since this employer-focused inception, Focus:HOPE continues to solicit and gather input from industry about its training programs through a number of channels. The most direct and visible channel is its employer advisory group. Four times a year MTI staff invite all of the employers who have hired MTI graduates to a meeting to discuss training and related issues with staff and other employers. Generally there are a dozen or so employers represented with whom the MTI staff review proposed modifications to the program and hear about training issues.

Focus:HOPE continues to solicit and gather input from industry about its training programs through a number of channels.

In the past these employer advisory groups have been particularly influential in restructuring the program to re-emphasize measurement and instrumentation skills throughout Core 1 training.

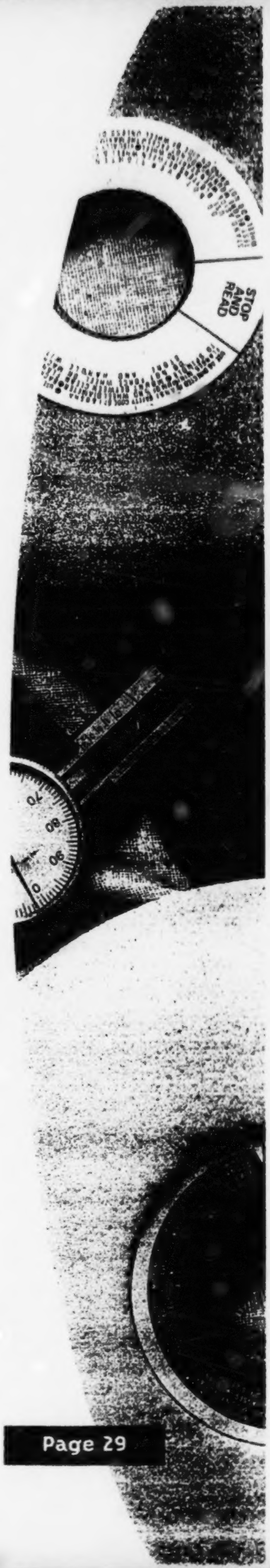
Employer input from the advisory groups also drove the development of the CAD courses, by communicating that there was growing demand for machinists who could draft and designers with practical machining experience — especially for the small- and even medium-sized shops that cannot afford to employ full-time design staffs. Meeting such training needs strengthens Focus:HOPE's credibility with employers, while opening another avenue for career advancement to young workers.

Through their extensive placement service network, Focus:HOPE works with over 200 companies in metropolitan Detroit. Placement managers maintain regular contact with human resource directors to monitor current and foreseeable workforce needs, and they keep them current on training completion dates. However, the placement department's interaction with the employer does not end with placing a trainee in a job. Focus:HOPE provides extensive "aftercare" by sending placement managers and instructors to work sites to talk through issues arising at the workplace. This direct contact with employers gives MTI placement managers an intimate understanding of the nuances of technical and soft skill requirements of various employers. It also smoothes the transition into jobs for many Focus:HOPE graduates, and it engenders a great deal of credibility and good will from the line supervisors.

While the placement managers concentrate on placing students and keeping them on the job, they also collaborate with the teaching staff and report findings from employers at staff meetings. This feedback leads to changes in MTI training curriculum. For example, in the past, misunderstandings and cultural differences have arisen between new workers and supervisors. Placement managers reporting back to the instructional staff helped retool MTI's communication classes. Now students learn not only how, but also why, it is important to be able to communicate clearly with their supervisors.

Providing Trained Workers When Employers Need Them

Focus:HOPE has designed the Core 1 program to meet a common set of skills standards, and it has scheduled training so that no employer has to wait longer than four weeks for a new crop of



machinists to graduate. To fill positions that require less technical training, employers can recruit trainees completing the First Step, Fast Track and Vestibule programs.

This system has historically worked well for employers and for Focus:HOPE. Now, however, under increasingly tight labor market conditions, many employers cannot or are afraid to wait for MTI students to graduate. Focus:HOPE is currently working with a core group of employers to develop a certification system where the MTI placement office would assist certified employers in recruiting MTI students. In return, the employer will allow the student to complete his or her program and also establish a payroll deduction program for the repayment of MTI tuition. Ideally, the employer will provide a match for the tuition payment as well. To date, Northwest Airlines and General Motors have agreed to become certified, and negotiations are underway with the remaining Big Three and several of the leading automotive part producers in the area.

> Key corporate and government advocates have continued over the years to provide critical financial assistance as well as political clout to leverage public funding.

Building Partnerships with Industry and Government

From the inception of its machinist training programs, the organization has sought key relationships with industry — particularly the Big Three automakers and the U.S. Department of Defense. To a great extent these ties have been cultivated through personal contacts with top executives and senior management, originally established by Father Cunningham. For example, Senator Carl Levin played a pivotal role in helping Focus:HOPE overcome bureaucratic hurdles to secure start-up government support for the Machinist Training Institute. Also during the MTI's start-up phase, critical corporate support came from the president of GM, James McDonald. When jobs were not to be found for 20 of the first 56 MTI graduates, GM (at the direction of President McDonald) gave Focus:HOPE several contracts for automotive parts totaling $3 million. Focus:HOPE was then able to employ the 20 graduates.

Key corporate and government advocates have continued over the years to provide critical financial assistance as well as political clout to leverage public funding. The most remarkable collaboration involving government, industry and educational institutions was that which led to the founding of the Center for Advanced Technologies. Through direct lobbying, calling to bear political

BEST COPY AVAILABLE

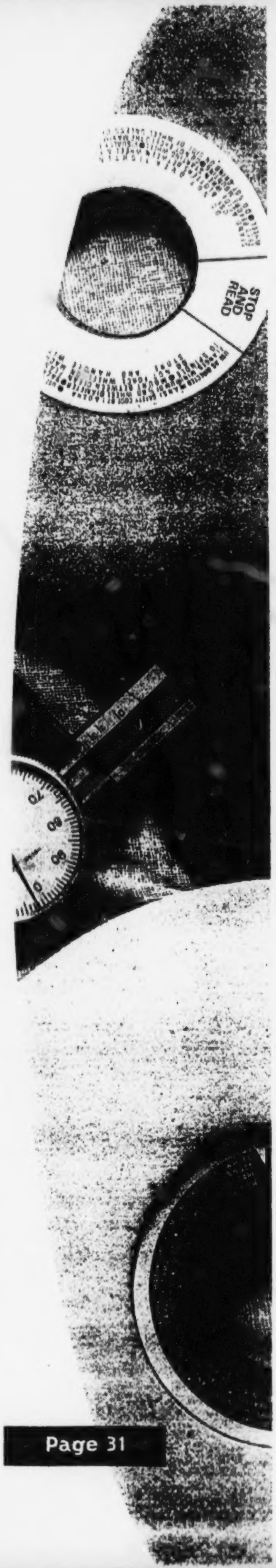
influence of major industry leaders and sheer perseverance, Focus:HOPE staff arranged for the signing of a memorandum of understanding by the U.S. Department of Defense, U.S. Department of Commerce, U.S. Department of Education and U.S. Department of Labor in 1987. This agreement was remarkable as the first ever of its kind, and it provided over $110 million of the $140 million in funding needed for the CAT.

Corporate executives not only muster corporate donations, but also personally provide large amounts to Focus:HOPE. For example, Roger Penske, chairman of Detroit Diesel Corporation, in 1998 pledged $1 million to the organization. Senior management at the Big Three has also been instrumental in engaging other parts of their respective organizations in supporting Focus:HOPE. Executive Director Eleanor Josaitis estimates that close to 15,000 people from Ford Motor Company have volunteered at her organization in a variety of capacities, with many serving as mentors for students.

Focus:HOPE reaches out to the broader industry through its extensive involvement with industry associations. The organization has been an important player in the move to establish national skills standards in the precision machining industry, hosting a national conference on skills and dedicating staff to participate on national boards on skills standards. Focus:HOPE has filled a critical role in validating each of the National Institute for Metalworking Skills' tests on machining skills standards to assure that they were gender and racially unbiased. Focus:HOPE was considered the only program of its kind in the country with a sufficient number of minority and women candidates to satisfy the validation criteria.

Strategically Recruiting Talent

Key relationships with industry provide more than just funding and volunteers; they are a source of managerial talent. Focus:HOPE has capitalized on close connections with the Big Three, other major corporations and the U.S. Department of Defense to recruit highly experienced technical experts and seasoned executives. Generally retirees or individuals taking early retirement, these professionals have years of experience and specific talents that are needed by the organization. They fill positions as instructors in the various training programs, manage the model businesses and serve as senior managers.

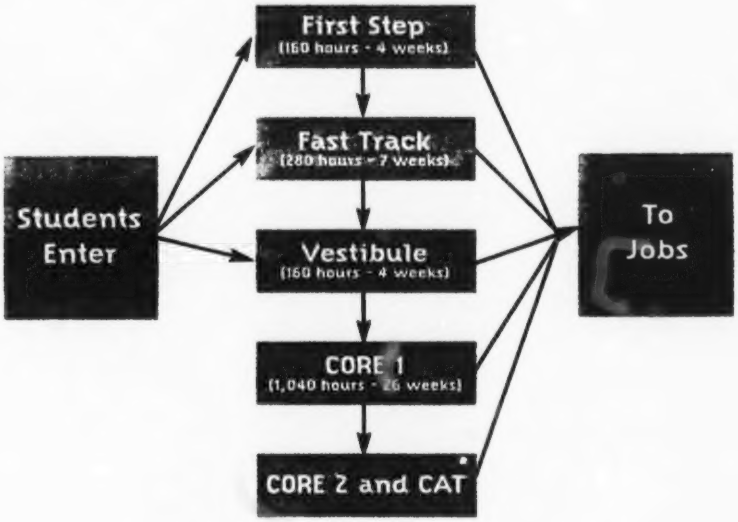


Perhaps the most striking example is Timothy Duperron, who Focus:HOPE hired as its associate director and chief operating officer in 1998. At that time, Focus:HOPE was beginning a process of organizational restructuring. Duperron, a former Ford Motor Company executive, brought tremendous experience to the task, having worked his way up the ladder at Ford Motor Company from an apprentice to director of the company's casting plant in Cleveland, one of the largest and most sophisticated facilities of its kind in the country. He brings a wealth of managerial experience and a deep understanding of the trade. Duperron is quite clear that his objective is for the organization to be run more like a business and less like a cause.

Focus:HOPE provides a range of machinist-related training. The heart of Focus:HOPE's training lies in the Machinist Training Institute (MTI) and particularly in that component of MTI referred to as Core 1, the 26-week course that imparts the primary skills students need to become machinists. This course, although it has been modified over time to respond to business and student needs, is the founding course of Focus:HOPE's training program and is the primary focus of this case study. Over the years, however, Focus:HOPE has added a number of other training options to serve a greater variety of student needs. It has added remedial programs to prepare students with poor academic skills for machinist training. It has added advanced courses, providing its clients the opportunity to earn associate's, bachelor's, and possibly master's degrees in manufacturing technology or engineering, providing opportunity for those students who show particular promise. Figure 4.1 shows Focus:HOPE's continuum of training options.

STOP AND READ

Figure 4.1 Focus:HOPE Training Continuum


First Step
(160 hours - 4 weeks)
Fast Track
(280 hours - 7 weeks)
Students Enter
Vestibule
(160 hours - 4 weeks)
To Jobs
CORE 1
(1,040 hours - 26 weeks)
CORE 2 and CAT

Admissions Process for MTI

All students who study at Focus:HOPE go through the same admissions process, described below. Through this process, the appropriate starting point — First Step, Fast Track or Vestibule — is gauged in Focus:HOPE's training continuum. ITC also shares this example, funding sources may require residency in a certain part of the city, proof of low income or receipt of public assistance and/or proof of employment status. Students who are not low-income and do not qualify for one of these funding sources may opt to pay the tuition themselves. Focus:HOPE has recently developed a new student loan program to meet the needs of these students.

Remedial Education Programs: First Step and Fast Track

Entry into the remedial programs, as for any Focus:HOPE training program, requires that participants have a high school diploma or a GED. Unfortunately, however, Focus:HOPE has found that these credentials in no way guarantee that an individual has mastery of basic reading and math skills. Thus, the remedial programs were developed in answer to this need.

First Step: First Step, a four-week program that brings participants from sixth-grade to eighth-grade proficiency in math, was begun in 1997, primarily in response to welfare reform. Classes are conducted in small groups, and a new class begins every four weeks. In the first full fiscal year, 113 students participated in First Step. Focus:HOPE staff felt the opportunities in machining and manufacturing could help former welfare recipients achieve self-sufficiency, but these applicants were often not ready for Focus:HOPE training. As the director of the program states:

> *... we found that those [individuals] with great intentions of getting off welfare couldn't quite make the standards for an entrance into any of our programs. And that was mainly because of math skills.*

In addition to working on math, students in First Step will also work on improving their reading and communication skills and developing work readiness and computer skills. Initially, all participants in First Step were women, and most had been out of high school for a number of years. Now, however, the age of First-Step students, like participants in other Focus:HOPE programs, is dropping, and many young men with poor test scores are also in the program to bring their math and reading levels up to an eighth-grade

STOP
AND
READ

level, preparing them for entry into Fast Track.

Fast Track: This program was begun in 1989 and is an intensive seven-week course designed to bring students with eighth-grade math and reading competency to the ninth-grade reading and tenth-grade math levels required for entrance into MTI. As a Fast Track instructor notes:

> *The curriculum involves math, communication skills, reading, writing assignments, resume writing, interview techniques and so forth and computer technology. Probably around 80 percent of the students coming in are computer illiterate. Our goal is an increase of two grade levels in seven weeks. And we do it.*

In fiscal year 1997-98, 515 students participated in Fast Track, and over 3,600 students have graduated since the start of the program.

Machinist Training: Vestibule and Core 1

The essential educational objective of Core 1 is to produce graduates who can read blueprints, set up machining jobs, run machines and inspect produced products. Graduates should be able to do this on three types of machines — lathes, mills and grinders. MTI emphasizes that it is creating employees who are skilled machinists and not just machine operators (many students have experience as operators).

Focus:HOPE's basic machining training is divided into two parts: Vestibule, a five-week introduction, and Core 1, which is 40 hours per week for 26 weeks. Both programs require classroom and computer work as well as hands-on instruction in the shop laboratory. Both classroom and lab instruction are geared to prepare students to be skilled machinists, and also to be ready for further training and education in computer numerical control programming, computer-aided design and mechanical engineering.

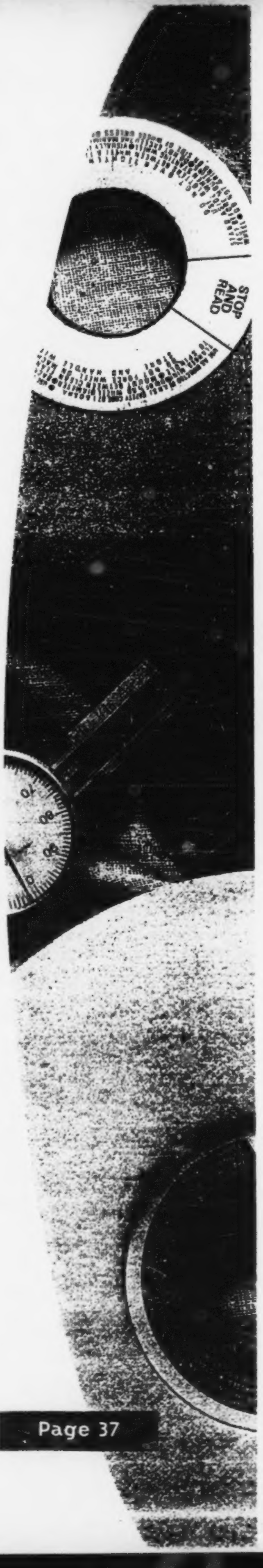
Vestibule: Vestibule is the introduction to Core 1. Its purpose is to introduce students to the topics and offer experience working on one type of machine — lathes — in the lab. Courses include shop theory, shop math, blueprint reading, technical drawing, communications skills, computer literacy, introduction to technology and lathes, for a total of 176 contact hours of study. As in Core 1, students are in training 40 hours per week and punch in their hours on a time clock. A new Vestibule class begins every four weeks.

Focus:HOPE developed Vestibule as a separate introductory course to allow students to see whether machining is really right for them before committing to a longer training program. Students who find machining may not be right or are not ready to make the commitment to being in training 40 hours per week can still successfully finish the course and not have to "drop out." Focus:HOPE staff also has the opportunity to observe students and may counsel those for whom the program does not seem a good fit. As one instructor stated:

> *It gives my students and our faculty the opportunity to — for the students, number one — to see if this is what they want to do five to six days a week, eight to ten hours a day with two to three hours worth of homework per night. Is this going to fit into your lifestyle? Can you make the changes it's going to take for you to be able to stick with this five to six, eight to ten, okay? It also gives us a chance to see if truly this person will fit this program, because it's not a flexible program at all. And so the first five weeks gives us all an opportunity to see if this is going to work for you.*

All students are expected to perform at a minimum level of 70 percent in all areas, as performing below 70 percent in any one area at the end of Vestibule will result in the student not being invited to take Core 1 training. Students with academic difficulties may repeat Vestibule, but records indicate that only a few students with academic problems elect to do this.

Although the curriculum and expectations of MTI are on the whole demanding and rigid, there is some flexibility built into the program in the distribution of clock hours that allows students to review problem areas or to intensify skill acquisition if they have easily mastered course demands. Students who complete projects ahead of schedule have enrichment time in advanced machines, concepts and projects. They are encouraged to take on additional pro-



jects in number and difficulty. Less accomplished students can improve their skills after hours. Classroom instructors and volunteers are available after hours from 4 to 6 p.m. and on Saturdays to help MTI students as well as those in First Step and Fast Track.

Core 1: The Core 1 program is a rigorous 40-hour per week program that combines classroom instruction with extensive hands-on experience on the shop floor. Core 1 requires 613 contact hours in classroom instruction and 495 contact hours of hands-on instruction in the shop laboratory. Computer literacy moves beyond basic skills and includes instruction in CAD and CNC programming and use. In addition, students learn to master mills, grinders and lathes.

Core 1 training seeks to impart a variety of skills. The first are hard skills, such as math, writing and verbal communications, that are pertinent to machining. These are primarily taught in the classroom where the average student/teacher ration is about 25 to one and are used in the lab. The second type of skills is hands-on mechanical skills learned in the shop where students must master the operation of actual machines. The ratio of instructors to students in the lab is 12 to one. Students must also be familiar with computer skills relevant to machining. Finally, there is a clear and directed emphasis on the acquisition of soft skills relevant to obtaining and retaining employment, including appropriate language, problem-solving, and responsibility and reliability.

Hands-on instruction in the shop laboratory is one important way students learn new skills in MTI.

Requirements for completion: Students complete Core 1 if they maintain a 70 percent average on homework, class assignments, projects and exams. Attendance, punctuality and a proper work attitude are also important in student evaluations. Instructors maintain records on student progress and attendance for each class and are required to complete a student progress report at each benchmark. Progress reports are given to the Core 1 manager, who supervises classroom work, or the special assistant to the manager of MTI who supervises shop work.

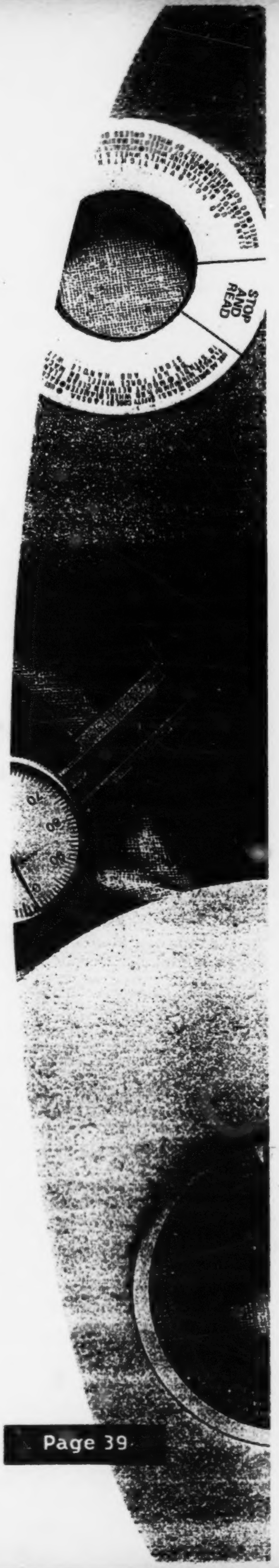
Anytime a student performs below 70 percent in an individual area, the instructor will counsel the student and issue the student a written academic warning. The student is given a specific time, not to exceed two weeks, to bring his or her grade up to 70 percent. If the student is unable to fulfill this requirement, then he or she is placed on academic probation and given another two weeks to improve performance. Following that period, it will be up to the manager of MTI to give the student another two weeks, place him or her back in a class or terminate the student.

Advanced Studies: Core 2 and CAT

Students who choose to continue on to Core 2 from Core 1 are generally preparing for study at the CAT. This is an advanced degree program that ultimately leads to a college-level degree. Through articulation agreements with regional institutions of higher education, Focus:HOPE can offer students associate's and bachelor's degrees.

Core 2: MTI's Core 2 program combines the basic elements of Core 1 training—classroom instruction—with "hands-on" activities. However, in Core 2 the laboratory is the factory floor in Focus:HOPE's Center for Advanced Technologies, a large shop with $50 million of state-of-the-art equipment, where students work fulfilling job contracts. Students, therefore, are in training and are also working at a starting wage of $8 per hour.

Core 2 training was recently cut from 26 to 13 weeks. A Core 2 instructor stated the change was to get participants to be "candidates" sooner. Candidates are full-time workers at CAT, producing parts for profit under contract. After completing an eight-hour work shift, candidates stay at CAT for an additional three hours a day to complete self-study modules (described more fully later) for their associate's or bachelor's degree. Describing the contraction of the program, one instructor noted its effect on making the program even more rigorous:



> *I think what they want to do is cut out some of the fat so to speak; instead of having it spread out, the instruction is going to be more intense. Students won't have the opportunity to just say, "if I don't get it today, I'll catch up on another day." Core 2 is now more geared towards becoming a candidate for CAT, and if you miss one class, you've missed a significant amount.*

This change may have also come about due to the financial pressures Focus:HOPE now faces. The considerable federal government support provided to Focus:HOPE to develop the CAT and cover operating costs during the early years is coming to an end. The CAT was originally envisioned to become self-sustaining through the fulfillment of production contracts along with the provision of education, and Focus:HOPE must now make this vision a reality. In order to do so, more candidates, who work full time at the CAT, are needed.

Candidates at CAT: Advanced training at Focus:HOPE at the CAT reflects a new curriculum and methodology for training technologist-engineers to build, operate, maintain, diagnose and repair complex, computer-integrated, flexible manufacturing equipment. The program emphasizes hands-on technical training and interdisciplinary engineering instruction. According to an instructor there, the Center for Advanced Technologies has two products:

> *...One is its graduates, its engineers; and the second is the hard product that we sell suppliers. Now depending on who you talk to, that product differentiation is going to be stronger, depending on who has what responsibility. So, as part of the education team, I say the product is the engineer… but if you talk to the shop floor supervisor, the product is what's getting shipped today.*

The CAT is home to a nonprofit business, and in its operations, it seeks to balance both its need to sustain itself as a business and its mission as a place of learning. In 1999 the CAT employed about 400 individuals, of whom about 100 were candidates for degrees and another 20 were Core 2 students. CAT managers seek production contracts that offer students opportunities to learn a variety of skills. The varied nature of the work involved in completing the contracts, however, implies that students will be slower and less productive on the floor, because they will be learning while they

BEST COPY AVAILABLE

work instead of continually repeating the same tasks.

The computer-based courses created and monitored by the Greenfield Coalition, a collaborative of six engineering colleges and universities and technology experts from manufacturing corporations, are self-paced and for the most part, self-taught in the CAT's e-library, a state of the art computer laboratory. Tutors (called leaders) are available, but there is little classroom instruction. Classes are presented as a series of modules. As an instructor noted, the program requires great self-discipline:

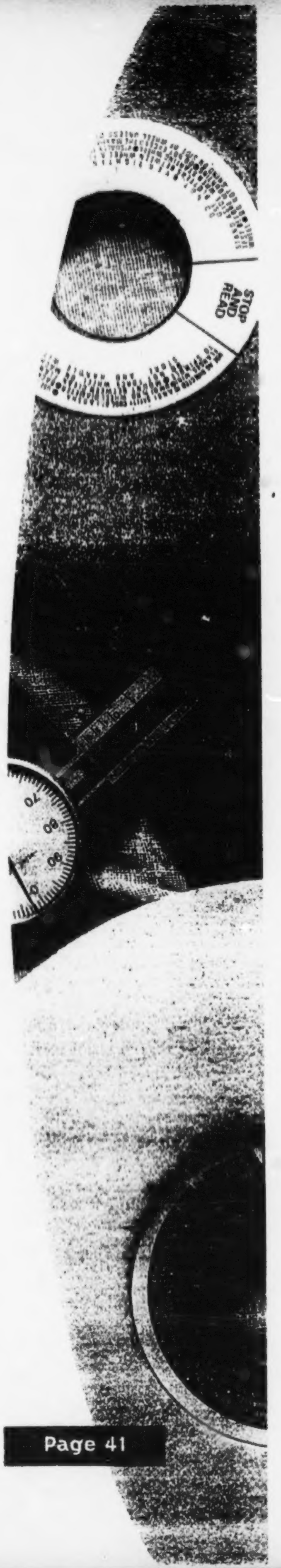
> *The math is self-paced. You have to drive yourself through the math. We're not going to go get you, put you in a classroom, hold your hand, then make you spit it back. So, in that way, there's more personal accountability, with closer near-term checks on competency. The pass rate is 85 percent, not 70, so the bar is higher. It's a big transition from passive learner in a classroom to being expected to take yourself up to the e-library and pick this up and do this and go through this module and work with the math leader and find out what you need to do.*

As noted, candidates work 40 hours a week, and attend the e-library for an additional three hours each day. Their pay rate is raised as they complete required modules, and by the end of the program students are earning $15 per hour. In 1999, there were 94 candidates in the program. From 1994-2000, the program has awarded 41 associate's and 16 bachelor's degrees.

The Learning Environment at MTI

Focus:HOPE's approach stresses the acquisition of soft skills and hard skills at all levels of the training continuum. Students are required not only to learn math, reading comprehension, blueprint reading and other topics, but they also must participate in a communications class and are challenged by their instructors to ask questions and apply communications skills that are appropriate to the work environment.

A very important feature of Core 1 training, which students appear to especially appreciate, is a concerted effort on the part of staff to help black students master the conflicts and difficulties associated with functioning well in an overwhelmingly white work world. (As noted, white males currently fill 90 percent of machining



jobs.) This training is particularly important as Focus:HOPE administrators and staff have noted that perhaps the biggest problem among their students is a lack of self-esteem. For example, a communications instructor notes:

> *So we're talking about some of the people who don't know what it is to be professional, don't know really what it is to be depended upon. Many have never filled out an employment application or learned how to get something done on time.*

To ensure performance standards that conform to employer demands, MTI representatives meet directly with employers to determine performance standards.

Vestibule and Core 1 take place in a simulated work environment, and Core 2 and CAT training take place in an actual work environment. Such environments at Focus:HOPE are simultaneously demanding and supportive, providing an excellent milieu for the development of soft skills, such as timeliness, appropriate employer/employee interactions and teamwork skills. Students wear machinist smocks, with the color of the smock indicating the student's training program, and must punch in and out on a time clock each day. Tardiness and unexcused absences have consistent and severe consequences. However, the environment at Focus:HOPE is said by students and staff to be far more supportive than that of the factory floor in the field. Students are encouraged to form networks with each other that result in real bonds.

The hands-on aspect of the training is particularly important to many students. For example, Sandi is a 20-year-old black woman who grew disenchanted with taking courses at Wayne State University. She stated:

> *I've always wanted to be an engineer, always, but once I finished my first year, I lost my excitement about going to Wayne State. I'm a hands-on type person. I noticed we barely had lab classes and things like that.*

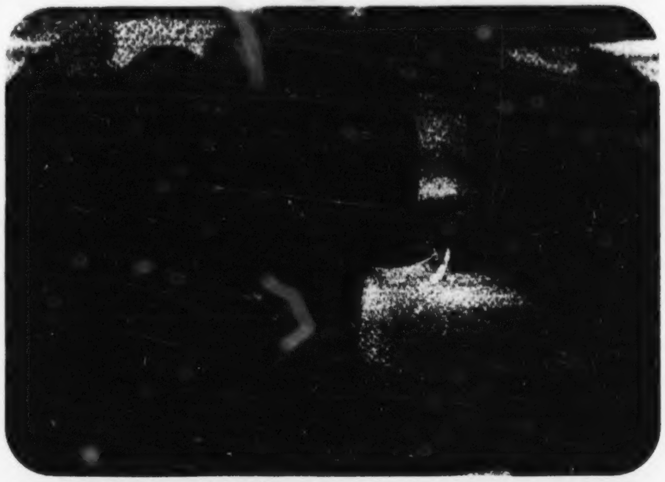
Sandi entered MTI, which not only offered her more of the hands-on training she sought, but also gave her more instructional and emotional support:

> *...like we can stay after school. I can go upstairs now and get help on anything I need. Teachers will stay after school with you. You really don't get that much in a college atmosphere. A lot of these people are like family to me, they really are. My teachers are real cool.*

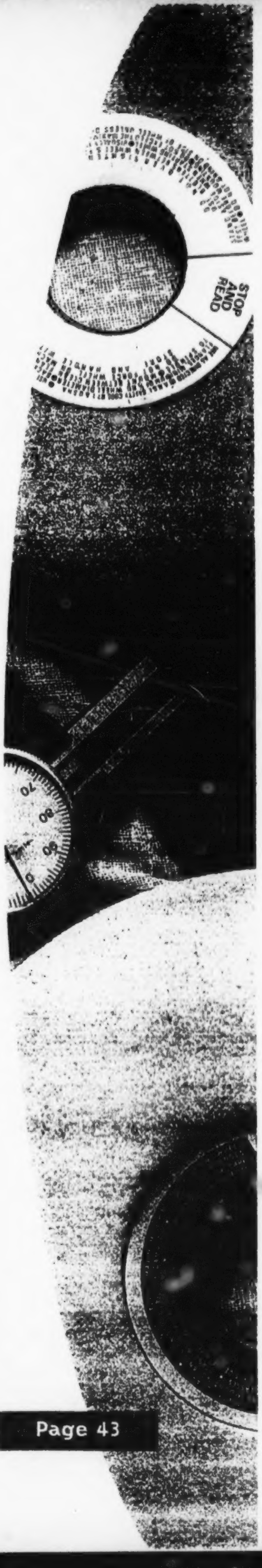
Curriculum Revisions: To ensure performance standards that conform to employer demands, MTI representatives meet directly with employers to determine performance standards. Employers are asked about expectations of skills, additional qualities sought, attendance patterns, etc. In addition, MTI maintains an Employer Advisory Board, which is consulted before any major changes are made in the curriculum. These advisors include area employers and representatives from institutions of higher learning and professional societies. Approval for curriculum and other policy changes is given by the executive director to the MTI manager, who meets with staff to initiate planning and implementation of tasks.

Student Demographic Profile

Focus:HOPE's target population has remained largely black. In fiscal year 1998, 94 percent of Core 1 trainees were black, with 5 percent of trainees being white and only 1 percent Hispanic. The number of female trainees has increased dramatically since inception, when trainees were almost all men. As of fiscal year 1998, fully 40 percent of Core 1 trainees were women. The age of trainees has also changed. In the early years, trainees were generally in their late 20s to early 30s and came to Focus:HOPE with at least some work experience. In fiscal year 1998 however, 26 percent of Core 1 trainees were less



Increasingly Focus: HOPE's training program is attracting younger participants – many straight from high school.



than 20 years old, most of these having come to Focus:HOPE straight from high school.

Several factors have led to the shift in demographics among Core 1 trainees. The first is the recognition of the opportunities that metal working can offer women. Here again Focus:HOPE chose not to be daunted by the all male profession but rather to seek integration along gender lines in the work place. This focus on recruiting and training women for the profession intensified in the wake of welfare reform. In addition to the older average age of metal working employees, perhaps the most significant change is in the economy — there are not as many laid off or unemployed workers as there have been in the past. A tight labor market often reduces demand for training programs like Focus:HOPE. Recruitment staff found, however, that for many recent high school graduates, Focus:HOPE offers important training and experience that can help them in the job market. The age shift requires considerable adjustment, however, among instructors who now have to deal with a much less mature student body. Helping students mature, understand the world of work, and focus on what they would like to do with their lives has become a greater part of the instructor's role at Focus:HOPE.

Recruitment staff found... that for many recent high school graduates, Focus:HOPE offers important training and experience that can help them in the job market.

One of the policy changes that has occurred due to the demographic change is the hiring of different instructors. As Ms. Woods, manager of MTI reported:

> *We have female instructors in the classroom, but we don't have any on the floor right now. What I'm looking for right now, is to get some female instructors on that floor...with our women population at 40 percent, they need to see other women out there.*

Woods surmises that half of women now enrolled in MTI are there because of changes in welfare law. Indeed in fiscal year 1998, 33 percent of Core 1 students came from households in which the head of household was on Temporary Aid for Needy Families (TANF). However, some students indicated that perhaps a significant number of women MTI students are high-performing young women who have long wanted to be engineers. These women indicated that Focus:HOPE appeared to them to be a more hands-on and a more emotionally supportive environment than a traditional college in which to pursue a nontraditional field. For example, Faith,

BEST COPY AVAILABLE

who is 23 years old and the single mother of two young children, was an honors student in high school. She completed Core 1 and elected to continue in Core 2 because she feels that as a young black woman, Focus:HOPE is a more comfortable place and gives her more support than either a traditional college or work environment could:

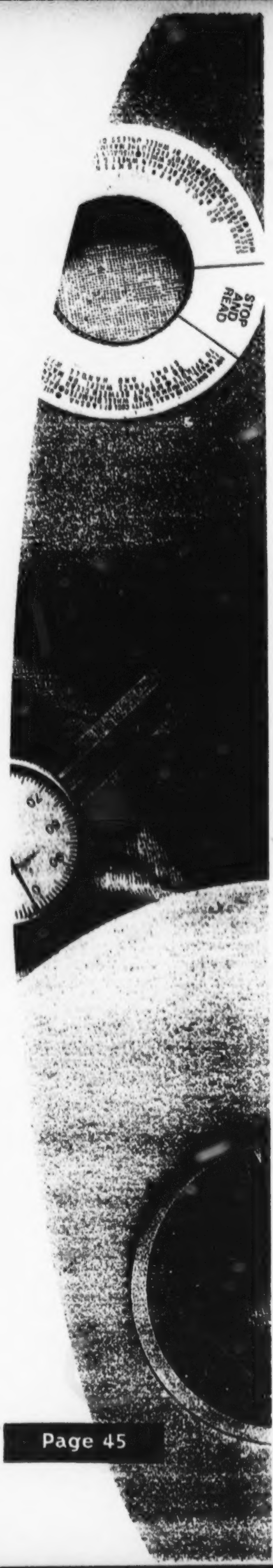
> *Focus:HOPE's training has kind of a built-in safety net. It's a learning facility, so you're allowed to make mistakes. I also really like the way MTI is structured. And I need that structure and discipline — not going to school three days a week, working three days a week. If I were off at a community college, I'd be likely to say to myself. 'I don't feel like going to class today,' and then the next thing you know, I wouldn't.*

Income Status: In 1998, the majority (69 percent) of MTI students came from homes with household incomes below 80 percent of the area median[19], and 45 percent lived in a household in which the income was below the poverty level.[20] However, it should be noted the increase of students coming to Focus:HOPE straight from high school has not only lowered the age of the average student, it has also resulted in a student body at MTI that is less disadvantaged than in the past.

An employment specialist noted that many of the new incoming MTI students are from working class backgrounds. He emphasized that many of them come from Big Three families who encouraged their children to prepare themselves for skilled jobs in the auto industry:

> *We're seeing many new students from working class backgrounds whose parents have worked at Chrysler all their lives. There are a lot of Big Three children. It is their life. It is their aspiration. It has been their aspiration to work for one of the Big Three.*

With close to 70 percent in low-income households and 45 percent in poverty households, however, Focus:HOPE is clearly still serving a significant number of disadvantaged individuals. Some students show extraordinary motivation, as Kevin's story (see box),



---

[19] A family income of less than 80 percent of the area median is the guideline used to determine low-income status by the U.S. Department of Housing and Urban Development.
[20] The poverty level refers to the U.S. Health and Human Services poverty threshold for 1997, the year for which these students reported their household income.

illustrates. One instructor spoke about the unusual motivation of many students from poor backgrounds:

> *Again, you're dealing with some students who have had to bring themselves up? I mean, there's nobody there, but the kids know that they can't exist without further education and without a good income-earning job. They know that they will be in jail. It's a motivating factor to say, yeah I want to do better.*

Kevin's Story

Kevin is a nineteen-year-old MTI student. He was raised by a physically and mentally disabled mother who, to his knowledge, had never held a job. He began working at the age of nine—carrying groceries, shoveling snow, pumping gas and, for a period when he was fourteen, selling drugs. By the time he was sixteen, he worked 40 hours a week in fast food jobs while maintaining a good grade average in high school. Even at the time of the interview he worked 24 hours a week at Target in addition to the required 40 hours at MTI. His goal is to be a manufacturing engineer, and he came to Focus:HOPE after a recruiter came to his high school and encouraged him to take the entrance tests.

Of the reasons the graduating students gave for why many of their classmates left the program, the most common explanation was that the younger students could just not keep up with the 40-hour per week schedule.

Attrition Issues

While Focus:HOPE prides itself on placing all graduates in good jobs, the high rate of attrition is a concern. According to the 1996 ACCET (Accrediting Council for Continuing Education and Training) accreditation report, only 40 percent of Fast Track students make it into MTI. More recent attrition rates have not been tabulated. Further, as part of a Ford-sponsored survey, nearly all the members of a particular Core 1 class were interviewed three weeks prior to their graduation. Only 11 students remained on schedule from the 70 who began it, however, a number were still in the program but had dropped behind. Of the reasons the graduating students gave for why many of their classmates left the program, the most common explanation was that the younger students could just not keep up with the 40-hour per week schedule. As one 19-year-old student stated:

BEST COPY AVAILABLE

> *You've got to be willing to stay after. You have to be willing to work the whole time. If you're on the shop floor those three hours, you have to be willing to work that whole time.*

James, a 33-year-old father of four explained that he didn't make it through Vestibule the first time because he couldn't make it through the math portion. He said that he was one of MTI's Class 136 that began with 90 students and finally had 20 make it to graduation. However, he persevered and repeated Vestibule in its entirety. He graduated with class 140 and had this to say about the different reasons older and younger students cannot make it through the program:

> *A lot of kids don't know how to apply themselves. I also think older people drop because of responsibilities at home, probably kids; I don't think it's because they don't know how to apply themselves.*

Other students and faculty cited pressing family or financial concerns as a reason students leave the program. Students in Core 1 do not earn any money in the program, nor do they have much time to maintain a job outside of the program. A placement counselor echoed this concern:

> *I was placing students who had graduated the program. Now I place those who don't graduate... students are not able to make it through the entire Core 1—generally due to financial constraints. There's just not enough dollars; there's not enough family support. There's a lot of difficulty completing a program where you're here 8 to 12 hours a day and you're not helping to provide.*

MTI: Program Leadership and Staffing

MTI is licensed by the state of Michigan Department of Education and is accredited by the Accrediting Council for Continuing Education and Training. The Focus:HOPE executive director and board of trustees undertake internal governance. Final decision-making authority about policies pertinent to program development or improvement rests with the executive director of Focus:HOPE. The manager of MTI ensures smooth day-to-day

STOP AND READ

operations as well as the implementation of new policies and procedures and advises the executive director regarding any planned changes in policy.

MTI has approximately 50 faculty and staff members, of whom about 15 to 20 are instructors. At the time of the case study visit, MTI's instructional programs were supervised by the manager of MTI who is assisted by the Vestibule manager, the Core 1 manager and the special assistant to the manager. As Focus:HOPE revises its overall organizational structure and introduces the new director of education position, the responsibilities of the manager of MTI and others may change. At the time of the visit, MTI did not have a curriculum specialist or student counselor on board, but both positions were suggested as needed by students and staff. The MTI and Vestibule managers who are also responsible for hiring evaluate instructors. Students also evaluate instructors.

Senior faculty at MTI is required to have four-year college degrees and/or journeyman cards in machining. They also must have five years teaching or working as machinists. Junior faculty must have two years of college instruction and at least three years working as machinists. Most classroom instructors have a bachelor's degree, two years of specialized training and two to five years of specialized job-related training. A number of instructors have up to 30 years of job-related training and experience.

Professional growth and development of staff is encouraged by MTI's policy of tuition reimbursement for outside classes (with a grade of "C" or better). MTI also offers multiple sessions of software training — Windows, Word, Access, Excel and Oracle — to all staff and faculty each month.

MTI: Critical Institutional and Funding Relationships

The national reputation of Focus:HOPE has been exceptionally helpful in developing relationships with financial supporters. MTI's key partners include the federal government, the state of Michigan, other educational institutions and corporate contributors.

Funding from Federal and State Programs: When students apply to MTI, they work with a financial counselor to determine what type of funding might be available to support them. Core 1 tuition is $7,750, and the MTI catalogue emphasizes that all expenses must be recovered. The organization recently switched to a tuition-based system for expenses, requiring students to take responsibility for much of the cost. Most students are covered through one of a number of funding sources. These include JTPA (the federal Job Training Partnership Act, recently replaced by the Workforce Investment Act), Work First funds, state employment and training funds, employment and training money from the Empowerment Zone, Pell Grants and others.

Students are responsible for understanding under what conditions this money is available to cover their tuition expense. For example, one funding source requires that students complete the training program and work in the field for which they were trained for at least 90 days. These students need to understand that if they leave the training early, even to accept employment, they may then become liable for the tuition cost since that funding source will no longer agree to pay. Students do not have any liability for training costs until they have completed 56 hours of training, and much of the attrition that occurs happens during this period. All students pay a $10 per week co-payment while in training to reinforce their commitment to the program.

MTI also has received federal and state money to make capital equipment purchases. For example, Focus:HOPE received U.S. Department of Health and Human Services, Office of Community Services grants to purchase equipment and renovate buildings. The U.S. Department of Defense Logistic Agency has given MTI access to its inventory records to find machinery located in warehouses throughout the United States that is not in use and would serve as good training equipment. Much of Focus:HOPE's training equipment came from Department of Defense through their Tools for Schools program. In October 1999 Focus:HOPE received a $1.5 million grant in federal assistance to expand its Machinist Training Institute.

Educational Institutions: MTI has ongoing relationships with a number of area institutions of higher education. MTI has an articulation agreement with Wayne County, Oakland and Macomb community colleges through which students who complete Core 1 training can receive credit toward an associate's degree. The

amount of credit transferred is generally equivalent to about one-half of the required course credits for an associate's degree. In addition, MTI serves on two national boards for skill sets in the metalworking industry through which it assists in setting industry standards, and in 1996 Focus:HOPE hosted a national meeting on skill standards.

For Core 2 and CAT curriculum development, Focus:HOPE works with the Greenfield Coalition, which includes five universities and colleges, six corporate partners, the Society of Manufacturing Engineers (SME) and Focus:HOPE. This coalition is looking at new forms of manufacturing engineering training that combine experience and academics in new ways. Academic institutions from this group advise Focus:HOPE on curriculum development for their advanced offerings, and it is through an agreement with two of these institutions, Lawrence Technological University and Wayne State University, that Focus:HOPE offers its associate's and bachelor's degrees. The other participating educational institutions include Lehigh University (Pennsylvania), University of Detroit Mercy and Michigan State University.

Focus:HOPE has support from a variety of public, private and philanthropic sources for its intensive training programs. The size of the organization and the number of programs within it has necessitated the development of a sophisticated accounting system in which each program is considered a cost center. Cost figures are derived from actual expenditures revealed through accounting records. Outcome information comes from a variety of sources but primarily from the placement and contracts compliance offices at Focus:HOPE. Anecdotal information is gleaned from employers and staff.

Outcomes

Typical outcomes tracked by job training programs include the number of trainees, graduates, individuals placed in jobs and individuals who stay in their jobs. The following table summarizes some of these key statistics for Focus:HOPE.

Table 5.1

Fiscal Year 1997 MTI Graduation and Placement Rates

Trainees*	415
Graduates	207
Trainees still in training	103
Number of terminees (individuals graduating or leaving the program)	312
Graduation rate**	66%
Graduates placed in jobs	144
Placement rate (as percent of graduates) in jobs	70%
Graduates entering Core 2	63
Placement rate (as percent of graduates) in jobs or further training	100%
Number of placed trainees still working at 90 days	114
Retention rate (as percent of job placements)	79%

**The number of trainees shown is the number of trainees who began training in fiscal year 1997. It does not include those who began training in the prior year and were completing training during fiscal year 1997.*

***The graduation rate is derived by taking the total number of graduates as a percent of the total number of program terminees, i.e. individuals who have left the program for any reason.*

Focus:HOPE's program is challenging, and while most trainees are able to make it through the training, about one-third of the trainees do not. Following training, Focus:HOPE appears to do an excellent job linking students to employment or further education, with 100 percent finding employment or choosing to continue on to Core 2 training. Focus:HOPE strongly encourages those for whom it would not be a financial or personal hardship for the individual or his or her family to continue on to Core 2 to further boost their ability to command a higher wage.

Focus:HOPE's placement department reported that wages at first placement for graduates of the program were $10.34 per hour in fiscal year 1997. A study by the U.S. Bureau of Labor Statistics found that in March 1998, in the Detroit-Ann Arbor-Flint central metropolitan statistical area, the mean wage for machine operators, assemblers and inspectors was $15.33 per hour and the median wage was $16.48.[21] The study found that 10 percent of the individuals employed in this occupation earned $7.93 per hour or less, and 25 percent earned $10.25 per hour or less. Thus, the wage rate earned by Focus:HOPE graduates is generally above that of the bottom quartile for this field, indicating that Focus:HOPE graduates may command a wage higher than the average starting wage for the occupation. Moreover, the BLS survey finds that in the top quartile of this occupation, individuals earn $20.25 per hour or more. This information is consistent with reports from employers about the possibility for wage advancement in this occupation group.

In addition to linking inner city residents with high-paying jobs that provide a livable wage, Focus:HOPE also considers the impact of its programs on its civil rights mission. Assessing the impact in this area is much more difficult, and little data is available. An important initial goal of the Machinist Training Institute was to contribute to the diversification of the workforce in an industry that had traditionally been dominated by white male workers. MTI placed some of the first blacks in machinist jobs. In the mid 1990s, Focus:HOPE began addressing the issues of opening employment opportunities for women in this nontraditional field. Staff sometimes had to work with employers to accommodate women in the workplace, including basics such as the provision of appropriate bathroom facilities.

MTI placed some of the first blacks in machinist jobs. In the mid 1990s, Focus:HOPE began addressing the issues of opening employment opportunities for women in this nontraditional field.

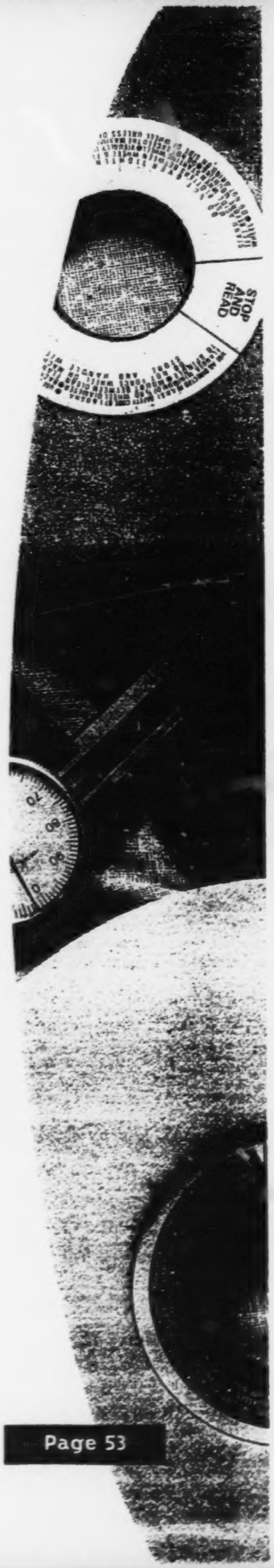
---

[21] U.S. Department of Labor, Bureau of Labor Statistics, *Detroit-Ann Arbor-Flint, MI National Compensation Survey*, March 1998. Bulletin 3095-05, (October 1998), 6.

Given that employers often ask current employees for referrals when recruiting new workers, getting the first few individuals into a shop may open opportunities for others; that is, Focus:HOPE's efforts at diversification could have a secondary impact or ripple effect. Detroit machining shops are much more diverse now in gender and ethnicity. However, it is difficult to determine how much of this greater diversification can be attributed to Focus:HOPE. Other forces, particularly the shortage of available labor, have encouraged employers to work with nontraditional candidates for jobs. Anecdotal staff experience seems to indicate that Focus:HOPE training contributed to the diversification of the workforce in the machining industry in Detroit, but data to confirm this assertion are difficult to find.

Focus:HOPE continues to seek opportunities to encourage greater diversity in the workplace. Recently MTI staff began working with General Motors and Lear Corporation on a design program that will encourage more blacks and women to enter the field of automobile design, a profession that remains heavily dominated by white males. The program works with a select group of MTI graduates who take classes at the community college while also working full time at Lear with a GM design team. Students are linked with mentors, and the point person for the program at GM is one of a very few black designers with the company. Management at GM is enthusiastic about the program, seeing it as an opportunity to increase the appeal of their products to minorities and women as well as contributing to diversity in the workplace. The program is in its second year, so the full impact of the program is yet to be seen. All of the graduates of the first class, however, were hired by GM to work in design.

Focus:HOPE is interested in improving its ability to track outcome information for its programs. Recently, the organization commissioned a study to look at the benefits of its training program in relation to the public dollars that are spent supporting it. This study estimated that graduates repay the public cost of the training in 3.1 years, based on an estimate of the increased payment of taxes and FICA and decreased reliance on public assistance among program graduates.[22] To have the capacity to do such studies more easily in the future, Focus:HOPE has begun asking all new trainees to



---

[22] John F. Sase, "Measuring the Net Benefits of Focus:HOPE's Machinist Training Institute Program," unpublished paper prepared for Focus:HOPE.

sign a waiver allowing the Michigan Employment Security Commission to provide Focus:HOPE with wage information on graduates. A key challenge for the organization will be how to effectively use this information. Currently Focus:HOPE collects a considerable amount of information about entering students, but staff enters only a small portion into the organization's data bases where it could be readily accessed and used for planning, evaluation or other management purposes.

By participating in the Aspen Institute's Sectoral Employment Development Learning Project, Focus:HOPE will have extensive survey information on labor market outcomes over time for a cohort of trainees who began the program in 1997. This information should also be valuable to the organization as it assesses the impact of its training program.

Program Costs

Focus:HOPE is a multimillion-dollar organization, with an operating budget of close to $62.5 million in fiscal year 1997. As mentioned in the program strategy section, the organization operates a wide range of programs, of which training is one part. The Machinist Training Institute, as a cost center in the accounting system, includes expenses for First Step and Fast Track as well as Vestibule, Core 1 and Core 2 training programs. Collectively, these training programs had a budget of close to $5 million in fiscal year 1997. As the largest among these training programs, Core 1 accounted for roughly $3.3 million in that year. Close to 60 percent of this cost was for staff costs, including teaching, placement, recruitment, contract compliance and administrative staff. Another 15 percent went to the cost of the facilities, and about 6 percent of the total cost was for student supplies. The remainder went to cover services provided centrally by the Focus:HOPE organization, including accounting, payroll and other administrative services.

The Focus:HOPE program is relatively expensive. The staff of the Employment and Training Department of the city of Detroit noted that the cost per trainee was on the high end of training programs that they fund. They also noted that Focus:HOPE provides a longer and more intensive training program than most others, and they place people into high-wage jobs with career potential. The following table looks at Focus:HOPE's costs in relation to the number of trainees, graduates, individuals placed in jobs and individuals who remain with their jobs for at least 90 days.

Table 5.2

Fiscal Year 1997 Cost Ratios

Total Operating Costs	$3,283,078
Number of Trainees	415
Cost per trainee	$7,911
Estimated number of graduates*	275
Cost per graduate	$11,924
Estimated number of job placements*	192
Cost per job placement	$17,141
Estimated number of job or training placements*	275
Cost per job or training placement	$11,924
Estimated number retained in work	151
Cost per retained job	$21,697

**Estimates are based on the graduation, placement and retention rates shown in the preceding table. The estimated number of graduates is found by multiplying the total number of trainees by the graduation rate.*

The cost per trainee shown in the table above is quite close to the tuition of $7,750 that Focus:HOPE charges for its Core 1 program. This cost per trainee will vary, however, given demand for services. Much like school systems, training programs struggle with periods of high demand, during which they try to stretch their facilities, and periods of low demand, when it is not feasible to keep all facilities open. Focus:HOPE has considerable resources invested in buildings and equipment, and a certain amount of resources needs to be expended to maintain these assets regardless of the number of students. Also, the number of students per teacher is allowed to vary within a specified range, and thus the costs for teachers can progress in a stepped fashion, rather than evenly increasing or decreasing along with the number of students.

Focus:HOPE experiences countercyclical demand for its services. In a tight labor market, there is less demand for training,

STOP
AND
READ

since individuals can easily find work, whereas during periods of high unemployment, people show more interest in a training program that can provide a competitive advantage in the labor market. Thus, with the current tight labor market in Detroit, Focus:HOPE is seeing demand for training decline. While the high cost of Focus:HOPE's training program seems to be justified by the outcomes achieved for participants, this cost is a serious fundraising challenge for the organization.

Funding Challenges

Focus:HOPE's Center for Advanced Technologies is facing more difficult funding challenges. In particular, the organization is struggling to attract enough students and business to maintain the CAT.

Focus:HOPE is now in the process of changing from a contract-based to a tuition-based funding system. As part of this change, Focus:HOPE is re-establishing a student loan system to accommodate students who do not qualify for support under any of its current contracts. Focus:HOPE had used the federal guaranteed student loan system in the past, but voluntarily withdrew from the program in the early 1990s when loan default rates became unacceptably high. Therefore, they are looking carefully at a variety or options for implementing the loan system to avoid repeating the past. Regardless of the funding source paying their tuition, however, all students are required to pay $10 per week to participate in the MTI program. Focus:HOPE charges students this amount to maintain student commitment to the program and remind students that they are investing in their future.

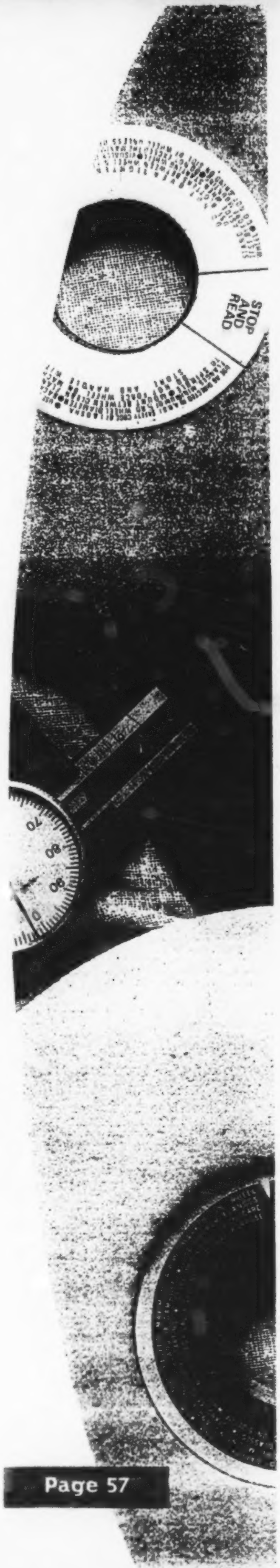
As Focus:HOPE broadens its recruitment efforts, there are more students who don't qualify for any of the public funding sources. Joanna Woods, the director of MTI, estimates that, at present, more than 30 percent of students are not low-income. It is primarily for these students that Focus:HOPE is crafting a new student loan program. Students incur tuition costs based on how many hours of training they attend. If a student only completes half of the program, then they are responsible for only half of the tuition fee. In addition, students do not have a legal obligation to pay anything until they have completed a certain number of hours. For example, for Core 1, students do not incur any financial obligation until they have completed 56 hours.

A challenge for Focus:HOPE as it institutes this new system will be to ensure that all students and staff understand the financial

BEST COPY AVAILABLE

obligations incurred by participating in Focus:HOPE's training. In a focus group with students, some students seemed to believe that if they were expelled from the training program, they would not owe any money, but if they quit, then they would be responsible for tuition costs. According to staff, however, this is not the policy. Some students complained that the hours of training recorded by the administration did not match the hours that they had actually been in training. Students also need to understand the specific requirements of the funding source that is paying for their tuition. For some students, the funding source will only pay the tuition if the student graduates from the training and remains in a job related to the training for at least 90 days. For other students, the funding source makes no such requirements. Developing the systems to ensure that the new tuition system is clearly explained to each student and properly administered is a challenge with which Focus:HOPE is now grappling.

Focus:HOPE's Center for Advanced Technologies is facing more difficult funding challenges. In particular, the organization is struggling to attract enough students and business to maintain the CAT. According to Tim Sullivan, manufacturing manager at the CAT, about 60 percent of the operating costs for the facility were covered through government sources three years ago. Today, only about 17 percent of the CAT's costs are met in this way. While it was hoped that this deficit would be filled through business contracts, the number of contracts won to date has not been sufficient to make up for the short fall. In addition, since students make up the labor force for contracts, it is difficult to aggressively pursue new business without a sufficient number of students. Focus:HOPE had traditionally only accepted graduates of the MTI into the CAT, but given the tight labor market and the long time period required from beginning training to graduating from MTI, this source has not shown itself to be an adequate pipeline of students. Therefore, the organization is now considering other possible sources for recruiting CAT candidates. Focus:HOPE's senior management team is also considering other methods for attracting the needed resources to support the CAT, and they have worked out a five-year business plan toward this end. Focus:HOPE's executive director, Eleanor Josaitis has, in her words, "a passion to bring the CAT to scale," and is clearly determined to achieve this goal.



Like many community-based groups, Focus:HOPE was not founded specifically to train and help the disadvantaged find jobs. In fact, Focus:Hope's mission is far broader, and workforce development is one of the organization's strategies to overcome racism and poverty and to promote social justice. Clearly the MTI and the related training programs have advanced Focus:HOPE's core mission by changing employment practices in a highly segregated occupation. By training and placing black men and women in machinist jobs, the organization has been able to bring down racial and other discriminatory barriers, while providing new economic opportunity for the disadvantaged.

It has been an integral part of Focus:HOPE's work to create opportunities for advancement through additional training and education, both within the organization and through a number of strategic partnerships ...

Keys to Success

Understanding labor market dynamics: To an outsider, launching a program to train and place blacks in a virtually all-white occupation at the depth of the economic recession of the early 1980s may have seemed at best overly idealistic. Yet, the Focus:HOPE experience shows how understanding the dynamics of the labor market ultimately allowed the organization to exploit a rare chance to create economic opportunity for disadvantaged people. Focus:HOPE recognized that the machinist trades were dominated by older white men—men who had earned middle class incomes and who were sending their kids to college. Thus there were few young machinists in the pipeline. So, even given the pervasive resistance to hiring blacks and women, if employers wanted to stay in business, they were going to have little choice. On the other hand, these workers had to be capable and skilled in order to compete. Focus:HOPE realized that its job was to make sure that its trainees were ready to work.

Meshing What Employers Want and Trainees Need: One of the most striking features of Focus:HOPE is how the MTI program accommodates the needs of individuals from the inner city while delivering workers who are fully equipped to meet the requirements of the workplace. MTI staff has gone to great lengths to solicit employer involvement in developing the various training curricula and it continues to engage industry in ongoing efforts to fine tune programs. This frequently turns critics into allies and fosters a sense of investment in Focus:HOPE's work. At the same time,

BEST COPY AVAILABLE

Focus:HOPE has always realized and appreciated the life challenges facing its students. MTI Manager Joanna Woods, estimates that of the students who drop out of the Core 1 program, 85 percent do so because they need to earn money to support themselves or their families. In other instances, students must leave the program for drug treatment or other counseling services. Thus, while it has been critical to establish firm expectations for student behavior and performance, it has been equally important to provide multiple ways of entering, exiting and re-entering the program. In addition Focus:HOPE has also learned that some nontraining services are critical for students. Providing child care in particular has helped ensure that single-parent students complete the day-in day-out demands of a long-term training program.

Developing Opportunities for Advancement: It is not enough to train and place new workers in entry-level jobs. Industry does not just need workers for entry-level positions, and most MTI graduates do not want to stay in entry-level jobs. It has been an integral part of Focus:HOPE's work to create opportunities for advancement through additional training and education, both within the organization and through a number of strategic partnerships with educational institutions, industry and government. Internally, Focus:HOPE has created a well-defined path for students to progress from remedial skill building in First Step to earning an engineering degree at the CAT. External collaboration opens doors for Focus:HOPE graduates through apprenticeship and other programs, and they ease the transition into the community college system.

Establishing Credibility and a Presence in the Labor Market: One of the things Focus:HOPE has done best is to establish a solid reputation with industry. Its graduates are successful employees because Focus:HOPE prepares them to meet the demands of the workplace. Employers know that Focus:HOPE actively solicits information and resources to continuously improve its programs. Competing head-to-head as a tier-one supplier to the Big Three provides another avenue for Focus:HOPE to demonstrate its technological expertise, earning industry's respect not only for its students but also for its products.

Focus:HOPE has also mastered the art of public relations. It has developed a national reputation, hosting some 50,000 or more

STOP AND READ

visitors a year. Clearly understanding the power of visual symbolism, Focus:HOPE awes visitors with its state-of-the-art facilities designed to showcase its technological capabilities. Locally, Focus:HOPE leverages the reputation it has earned in the community through the commodity supplemental food program and other services to recruit students for the MTI program. Many students have been introduced to the program through a mother or relative who had received food from Focus:HOPE. Moreover, its enormous volunteer program ensures that the organization remains connected to corporate and individual citizens throughout metropolitan Detroit. The high profile Focus:HOPE has developed has been critical for fund raising and furthering Focus:HOPE's policy objectives.

Quality of Leadership and Dedication to Mission: The leadership of Father Cunningham was a key factor in developing Focus:HOPE's high profile in the community. He was a dynamic and charismatic individual who excelled at inspiring people to join his cause. These qualities made Father Cunningham an exceptional fundraiser for the organization as well as an inspirational leader who attracted talented individuals to the organization and motivated staff to work hard despite being paid below market wages.

A key element in staff motivation is the focus on the mission. Virtually every staff member can recite the mission of the organization, and many refer to the mission in explaining why they do what they do. The mission is posted in many places throughout the organization and is printed on the back of all business cards. This focus on the mission helps staff stay motivated and keeps the organization focused on its goals.

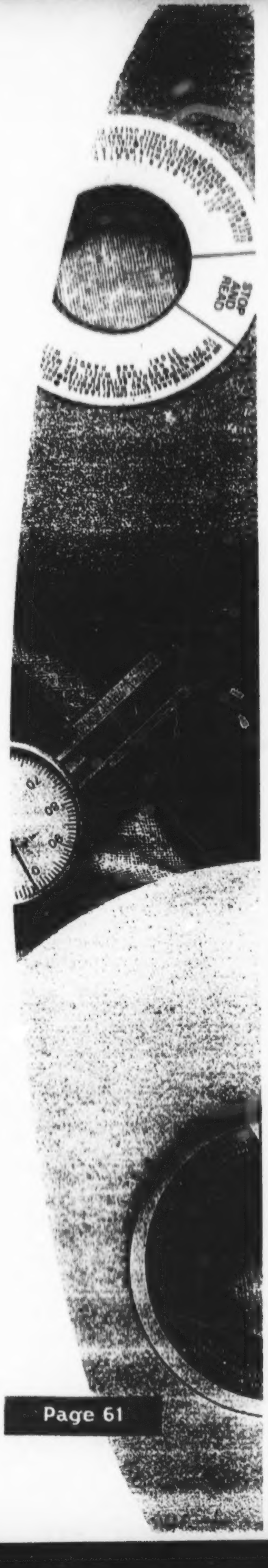
Focus:HOPE continues to be served by a capable leader, Eleanor Josaitis, but the quality of the leadership has changed. There is less reliance on a charismatic and persuasive leader now and more emphasis on building management systems. Given the growth in size of the organization, this shift is needed, particularly since corporate and philanthropic supporters of the organization are increasingly looking for these kinds of systems. For the organization, however, it is an adjustment to work within a new and necessarily more bureaucratic system. Maintaining the focus on the mission and the high level of motivation among the staff while rationalizing the operations of the organization is a current challenge for Focus:HOPE.

Challenges and Building on the Lessons of the Past

One Mission—Conflicting Objectives: A key aspect of the MTI's strategic plan for the near term is to intensify recruitment of white students from the Detroit suburbs. Focus:HOPE believes that increasing white enrollment would serve to integrate the student body and establish the MTI as a regional center for machinist training. However, there is some concern among the organization's supporters that intensifying efforts to create a more diverse student body may weaken the organization's impact on fighting poverty and improving employment opportunities for the disadvantaged. Focus:HOPE staff, on the other hand, views the effort as another step toward overcoming racial barriers. By integrating its classes along socio-economic and racial lines, Focus:HOPE provides another avenue for improving communication and understanding across these lines. The challenge is to clearly articulate to supporters and others how this new approach contributes to the organization's mission overall and to demonstrate that this can be done without sacrificing the goal of overcoming poverty, which is also part of the mission statement.

Most organizations that grow struggle with change and Focus:HOPE is no exception. Over the years, Focus:HOPE has grown by exploiting opportunities. Even the genesis of the machinist training program was precipitated by the chance relocation of a neighboring machine tool company. To a great extent the entrepreneurial and opportunistic way in which Focus:HOPE has grown reflects its charismatic co-founder, Father Cunningham. As Tom Armstead, assistant director, stated, Cunningham believed in acting first and then figuring out how to get something done. Through a combination of ardent advocacy and personal diplomacy, Cunningham forged many of Focus:HOPE's most important partnerships with industry and government, partnerships that channeled enormous resources to the organization.

Father Cunningham's management style was also highly personalized, and he frequently decided minute operational details, such as insisting that the turbines in the CAT's co-generation plant be painted fire engine red. However, even Father Cunningham realized before he died that Focus:HOPE had grown too large to be



BEST COPY AVAILABLE

managed as it had been in the past. Clearly, recruiting Tim Duperron as chief operating officer was driven by the need to control costs and to improve the operating efficiency. As the organization moves into this next phase, the challenge will be to implement more structured administrative systems while not losing the creative, can-do attitude that typified Focus:HOPE's earlier years.

Is Becoming a Machinist the Ultimate Goal: After 30 years of growth, Focus:HOPE's programs are well known throughout the black community in Detroit. Given the well-documented obstacles that hinder young blacks from pursuing higher education, many young black men and women chose to go to the MTI instead of pursuing other higher educational opportunities.[23] In some cases a student enters machinist training to launch his or her education in automotive or engineering design. In other cases, students go to MTI to learn a trade that will allow them to make money while they pursue their true professional goal. While these students may have no intention of staying in the field, a background in machining allows them to support themselves while they study in a different field. One young man who had recently completed the Core 1 program was already enrolled in medical school. Focus:HOPE has a number of students who have been accepted to college but come to Focus:HOPE as an interim step. Some Focus:HOPE students had started college but found they were unprepared. For these students, Focus:HOPE fills the academic gap between high school and college. While machinist training may help facilitate the transition into the machining industry for some students, for others it provides an alternative path to a variety of different careers. For Focus:HOPE the challenge is to ensure that its resources are deployed in a way that best serves its mission.

While machinist training may help facilitate the transition into the machining industry for some students, for others it provides an alternative path to a variety of different careers.

The Challenge of Serving Different Kinds of Students: Making sure that students are well matched for the machinist occupations has become increasingly difficult given the changing profile of students recently entering classes. Over the first decade of the machinist training program, the typical entering student was black, male and in his late 20s or early 30s. Today, that profile is significantly different with the typical student being closer to 20 and very possibly female. According to general observations from the MTI staff, older students generally have a good sense that they want a

---

[23] Susan Turner-Meiklejohn, "A Finding in Search of an Explanation, Overqualified Minority Youth in a Sectoral Job Training Program: Implications for the Workforce Investment Act." Presented at the 1999 Association of Collegiate Schools of Planning Conference. (October 19, 1999).

Although Focus: HOPE trainees were once nearly all male, today some 40 percent of Core 1 trainees are women.

career as machinists or at least they want to be in the industry. Younger students seem to be less sure and, hence, they have less at stake in the outcome of long-term training. These younger students present other challenges, such as requiring more mentoring, and the presence of women on the shop floor has given rise to isolated incidents of sexual harassment — all of which requires much more managerial oversight than was required in previous years.

In addition to adjusting to the changing demographic profile of the MTI's current student population, Focus:HOPE is challenged by the declining level of preparedness of the individuals applying for admission to MTI programs. The shrinking pool of qualified applicants is most dramatically apparent when reviewing recent admission test scores. Over 40 percent of the individuals tested could not qualify for the most remedial of Focus:HOPE's programs; that is, they did not even have sixth-grade math and eighth-grade reading skills despite having a high school degree or GED. The drop in academic preparedness of applicants means the average student needs more remedial training, lengthening the amount of time it will take for a student to begin, and hence graduate from, a technical machinist training program.

STOP AND READ

MTI Entrance Exams Show the Lack of Preparedness of Applicants

In 1998 Focus:HOPE tested 3,783 potential technical training applicants — all with a high school diploma or GED. Of those tested:

- 749 or 20 percent could directly enter technical training
- 788 or 21 percent required Fast Track
- 636 or 17 percent required First Step
- 1,610 or 42 percent were unable to qualify for any current program

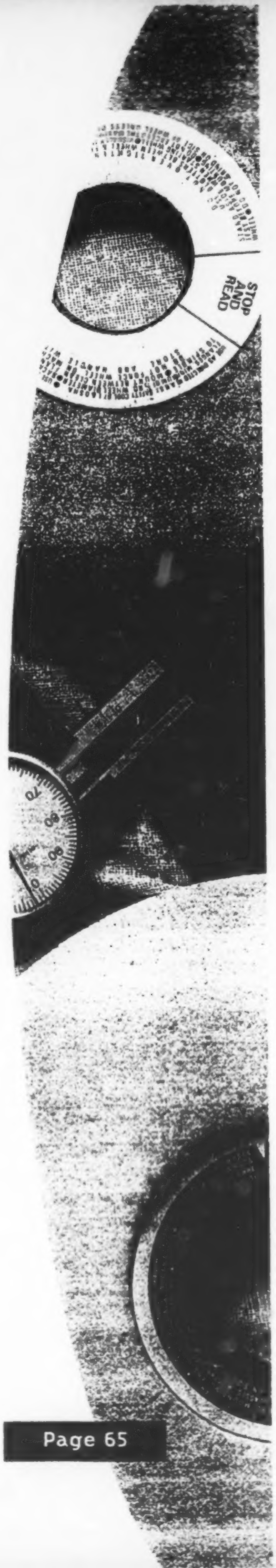
The Double Edge of a Strong Labor Market: The changing profile of MTI applicants and entering students is due in part to the very tight labor market Detroit is now experiencing. Older individuals with some work experience are more easily absorbed into the metropolitan labor market. Even young inexperienced students still in training are being recruited by employers desperate for capable workers.

While the strength of the labor market has meant that there are more opportunities for Focus:HOPE graduates, it has also meant that there is less incentive for people who are economically hard-pressed to invest their time (and money) in training — particularly long-term training. Essentially, the opportunity cost of participating in training is now higher for most potential applicants. Focus:HOPE's training staff contends, however, that it may be easy to get an entry-level job now, but workers with limited skills will have a difficult time advancing, and they are usually the first to be laid off during economic downturns. Nonetheless, a challenge for Focus:HOPE will be to convince students of this argument. A possible avenue for exploration would be to develop training programs that would allow students to work while they receive training. Indeed Focus:HOPE has begun experimenting with employers on customized training models and other approaches that would allow students to pursue long-term training and educational goals without incurring such a high opportunity cost. Finding the right training model in this tight labor market remains an ongoing challenge.

Meeting Funding Challenges: While lower enrollment levels have affected the cash flow for the organization, a larger challenge is reducing its reliance on federal funding. Between 1995 and 1999 the share of Focus:HOPE's funding attributable to the federal government dropped from 62 percent to 18 percent, largely because of the termination of a multiyear U.S. Department of Defense grant that helped establish the CAT. Damages from a tornado in 1997 amounted to $18 million, and the loss of a large GM contract has further strained the organization's financial status. These financial difficulties have caused the organization to terminate staff positions, consider privatizing some services and intensified efforts to increase state support and local and foundation funding.

Focus:HOPE is also exploring ways to help fully cover the expense of providing well-qualified workers to employers. The employer certification program is one way to increase the repayment of student loans, increase cash flow and reduce bad debt expenses. In addition Focus:HOPE is attempting to quantify the value to employers of the job-readiness skills instilled through the MTI training programs. The financial staff is currently assessing an employer's savings in costs from hiring a CAT graduate who has actual design experience in a state-of-the-art manufacturing environment and is ready to work versus the typical engineering school graduate who needs about a year of on-the-job training before becoming productive. Ultimately the organization expects to craft a number of mechanisms through which employers would contribute towards the cost of training and pay for a graduate's immediate value as a productive worker.

The Inherent Conflict of Running Model Businesses: For community-based organizations, operating model businesses is plagued with contradictory objectives. Focus:HOPE utilizes its model businesses to train students, employ graduates, improve training programs and establish its technological expertise with employers — all while covering costs or even turning a profit. To accommodate these multiple objectives Focus:HOPE has learned not to be wedded to a particular structure for its model businesses. Enterprises are formed and dissolved according to the changing needs of the organization. Generally speaking, the for-profit enterprises serve as employers of Fast Track and/or MTI graduates and



nonprofit enterprises as training centers for Core 2 students and the CAT engineering degree candidates.

An ongoing conundrum for Focus:HOPE's management is coordinating employment and training schedules of the Core 2 students with the production requirements of the nonprofit businesses. As Tim Sullivan, manufacturing manager, states:

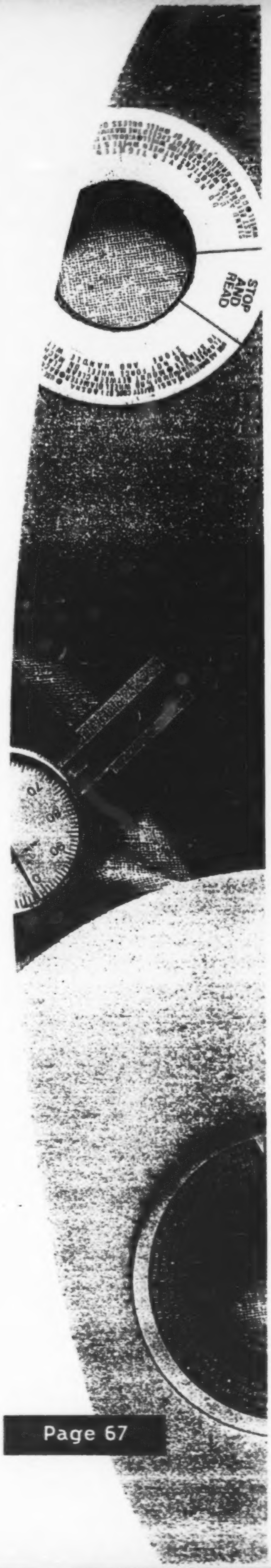
> *Our number one product is our students. But, juggling work schedules to accommodate students who are on the job four hours a day and who are in class for four hours can be difficult at times.*

Moreover, in order to expose a trainee to the full range of production processes, a Core 2 trainee rotates through a series of jobs. Just as the trainee hits his or her optimum efficiency it is time to move on to the next position, and the enterprise's overall productivity suffers. To date, Focus:HOPE's model training businesses have been able to offset this decreased productivity by paying student employees less than other employers, but developing an adequate volume of business that is both a beneficial learning experience for the student and a profitable line of work for the company remains a challenge.

Making Sure All Detroit's Disadvantaged Benefit from Focus Hope's Programs: While no one can argue with Focus:HOPE's record of breaking down barriers to entry and advancement in the machinist trades for black men and women, the organization has been less successful in making sure other disadvantaged groups benefit from its programs. Focus:HOPE has attempted at times to recruit from other communities, but currently only one percent of Core 1 enrollees are Asian or Hispanic. According to Focus:HOPE staff, Detroit's poor public transportation is a significant factor that isolates other groups from MTI's programs. Some staff members believe, however, that the organization needs to find a way around this obstacle and must develop more effective means of reaching beyond Focus:HOPE's traditional community.

Just as some are concerned that the organization is not doing enough to reach other minority groups, others express concern that the organization will lose its focus on low-income individuals. While it may be desirable to have individuals from a variety of economic circumstances interacting with each other in Focus:HOPE's classrooms, an important part of the mission of the organization is "...to overcome racism, poverty and injustice." Some individuals expressed concern that new initiatives, such as the student loan program and recruiting at high schools that are not in disadvantaged communities, may dilute the power of the educational offerings to provide economic opportunity to low-income individuals. There is concern that the organization will put less energy into attracting and managing the public and private resources needed to support the participation of poor individuals in Focus:HOPE's educational offerings at all levels.

As they discuss this goal, as always, staff talks about the mission. Focus:HOPE's mission has guided the organization into various endeavors, from lawsuits to food distribution to marches to training programs. While Focus:HOPE has developed world class training programs and has extraordinary training facilities, it is clear that the energy and enthusiasm staff and volunteers have brought to make these training programs a reality came to the organization because of a belief in its mission. As Focus:HOPE proceeds, retaining this intense focus on the mission will be a great challenge, and, it is hoped, an inspirational accomplishment.



THE ASPEN INSTITUTE
One Dupont Circle, NW
Suite 700
Washington, DC 20036